
INTERNATIONAL PROPERTY MAINTENANCE CODE

PM2-07/08

110.1, Appendix A (New)

Proposed Change as Submitted:

Proponent: Wayne R. Jewell, City of Southfield, representing Hazard Abatement in Existing Buildings Committee

1. Revise as follows:

110.1 General. The code official shall order the owner of any premises upon which is located any structure, which in the code official's judgment after review is so ~~old~~, deteriorated or dilapidated or has become so out of repair as to be dangerous, unsafe, insanitary or otherwise unfit for human habitation or occupancy, and such that it is unreasonable to repair the structure, to demolish and remove such structure; or if such structure is capable of being made safe by repairs, to repair and make safe and sanitary or, to board up and hold for future repair or to demolish and remove at the owner's option; or where there has been a cessation of normal construction of any structure for a period of more than two years, the code official shall order the owner to demolish and remove such structure, or board up until future repair. Boarding the building up for future repair shall not extend beyond one year, unless approved by the building official.

2. Add new text as follows:

APPENDIX A **BOARDING STANDARD**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance

A101 GENERAL

A101.1 General. All windows and doors shall be boarded in an approved manner to prevent entry by unauthorized persons and shall be painted to correspond to the color of the existing structure.

A102 MATERIALS

A102.1 Boarding sheet material. Boarding sheet material shall be minimum ½-inch thick wood structural panels complying with the *International Building Code*.

A102.2 Boarding framing material. Boarding framing material shall be minimum nominal 2-inch by 4-inch solid sawn lumber complying with the *International Building Code*.

A102.3 Boarding fasteners. Boarding fasteners shall be minimum 3/8-inch diameter carriage bolts of such a length as required to penetrate the assembly and as required to adequately attach the washers and nuts. Washers and nuts shall comply with the *International Building Code*.

A103 INSTALLATION

A103.1 Boarding installation. The boarding installation shall be in accordance with Figures A1 and A2 and Sections A103.2 through A103.5

A103.2 Boarding sheet material. The boarding sheet material shall be cut to fit the door or window opening neatly or shall be cut to provide an equal overlap at the perimeter of the door or window.

A103.3 Windows. The window shall be opened to allow the carriage bolt to pass through or the window sash shall be removed and stored. The boarding framing material shall be cut minimum 2 inches wider than the window opening and shall be placed on the inside of the window opening 6 inches minimum above the top and below the bottom of the window opening. The framing and boarding shall be predrilled. The assembly shall be aligned and the bolts, washers and nuts shall be installed and secured.

A103.4 Door walls. The door opening shall be framed with boarding framing material secured at the entire perimeter and at not more than 24 inches on center horizontally. Blocking shall also be secured at not more than 48 inches on center vertically. Boarding sheet material shall be secured with screws and nails alternating every 6 inches on center.

A103.5 Doors. Doors shall be secured by the same method as for windows or door openings. One door to the structure shall be available for authorized entry and shall be secured and locked in an approved manner.

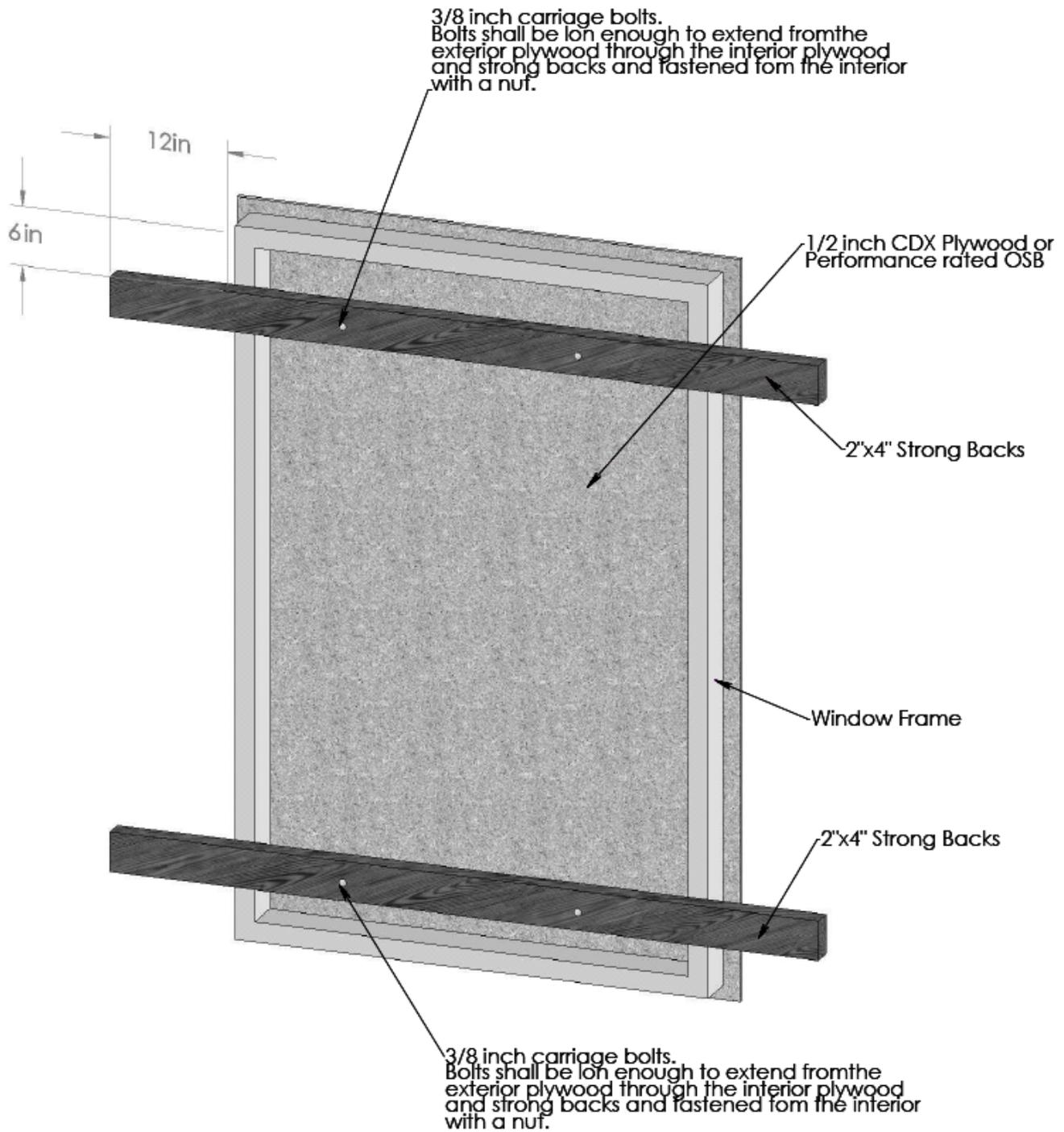


FIGURE 1 – BOARDING OF DOOR OR WINDOW

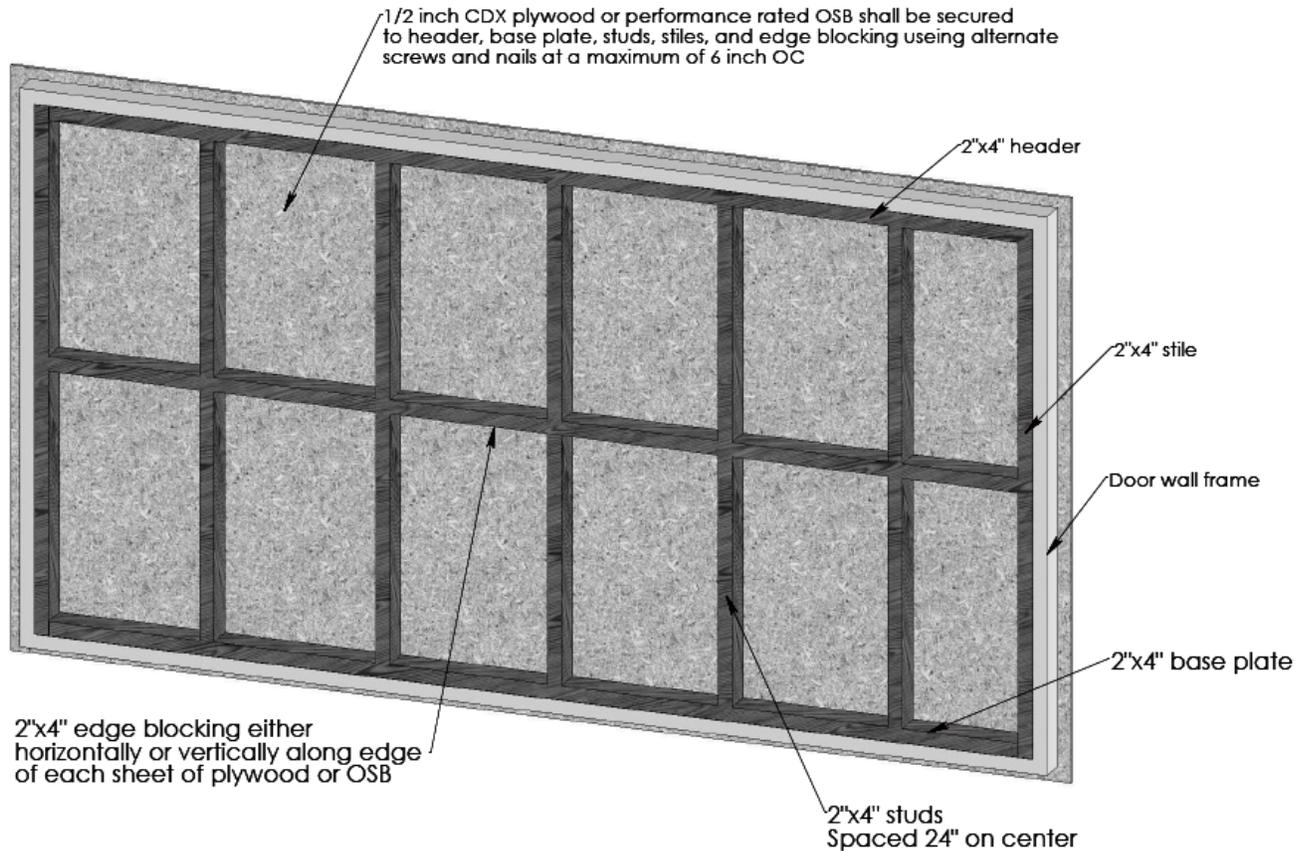


FIGURE 2 – BOARDING OF DOOR WALL

Reason: The ICC Board approved the development of new code requirements in the I-Codes which address hazards, such as those from fire, as well as, the development of requirements relative to issues such as hazardous conditions due to structural issues. This would provide code requirements for all disciplines to be used by building owners to bring their existing building stock up to minimum standards and enforcing agencies when performing inspections of existing buildings. The Hazard Abatement of Existing Buildings Committee (HAEB) was formed to develop these requirements.

During this 07/08 cycle, the HAEB committee is proposing several unsafe conditions requirements for inclusion within the text of the existing International Codes, predominately the *International Property Maintenance Code* and the *International Fire Code*.

During the 06/07 cycle, the committee proposed this boarding appendix as part of a larger proposal to Chapter 1 of the IPMC. Based on comments received from the Code Committee as well as the membership, this committee has decided not to pursue revisions to the notice and form requirements of the IPMC. However, this committee believes that the option of boarding a building for future repair is needed.

This proposal focuses on the necessary changes to allow a building owner to board up and secure an existing building and premises for future repair as an alternative to immediate repair or demolition. To ensure that the repair work is performed in a timely manner a one year limit on boarding a facility for future repair is suggested. This can be lengthened when approved by the code official.

A section-by-section discussion follows:

Section 110.1: This section has been revised to allow an owner to board and secure a structure for future repair as an alternative to immediate repair or demolition.

Appendix A Boarding Standard (new): Appendix A provides minimum specifications for boarding a structure. This can be utilized by a jurisdiction as a set of minimum requirements in order to result in consistent boarding quality. These requirements also provide a reasonable means to eliminate having to approve numerous methods or materials for the boarding and securing of a structure.

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

Committee Action:

Disapproved

Committee Reason: The committee felt that, even though located in an appendix, the requirements for boarding of openings were too stringent and would pose too much of a burden on local municipalities in terms of inspections and costs of inspections. Further, the committee indicated that there were some inconsistencies between the text of the Appendix and the notes on the Figures in the Appendix.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Wayne R. Jewell, Chair, ICC Hazard Abatement in Existing Buildings Committee, requests Approval as Modified by this public comment.

Modify proposal as follows:

A103.3 Windows. The window shall be opened to allow the carriage bolt to pass through or the window sash shall be removed and stored. The ~~boarding 2x4 strong back~~ framing material shall be cut a minimum of 12 inches wider than the window opening and shall be placed on the inside of the window opening 6 inches minimum above the ~~bottom top~~ and below the ~~top bottom~~ of the window opening. The framing and boarding shall be predrilled. The assembly shall be aligned and the bolts, washers and nuts shall be installed and secured.

A103.4 Door walls. The door opening shall be framed with minimum 2x4 boarding framing material secured at the entire perimeter and vertical members at not more than 24 inches on center ~~horizontally~~. Blocking shall also be secured at not more than 48 inches on center vertically. Boarding sheet material shall be secured with screws and nails alternating every 6 inches on center.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: The committee thought that these provisions were too stringent and could pose a burden on a local community in terms of inspections and cost of inspections. Cost associated with verifying that a property that was ordered secured by this standard or some other method are equal, no additional burden of numbers or cost of inspection is created. An inspector simply has a minimum material and fastener schedule to observe. Currently, Section 108.2 of the code requires that a vacant structure be "closed up so as to not be an attractive nuisance." Well, how is that accomplished? Not having this standard in the appendix leaves the code void of any guidance or provision as to how to "close up", board or secure a building. Being an Appendix it is not a mandatory requirement of the code unless the appendix is specifically adopted. Even if not adopted it is a resource to be used by a property owner for guidance as to how to "close up" a vacant property that they own.

Final Action: AS AM AMPC____ D

**PM3-07/08
202**

Proposed Change as Submitted:

Proponent: Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes

Revise definition as follows:

**SECTION 202
GENERAL DEFINITIONS**

EXTERMINATION. The control and elimination of insects, rats or other pests by eliminating their harborage places; by removing or making inaccessible materials that serve as their food; ~~by poison spraying, fumigating, trapping or by any other approved pest elimination methods, or water; by trapping; and, when necessary, by use of registered pesticides~~ consistent with label instructions in a manner that effectively controls the pest with the lowest exposure to occupants.

Reason: The current language has several shortcomings:

1. It does not address the need to restrict pests' access to water. Pests such as cockroaches and mice rely on regular sources of moisture to survive. Because many pests eat standard building materials, controlling food without controlling water is not effective extermination.
2. The term "poison spraying" is too narrow: some effective pesticides are not poisons. Pesticide is the more common and appropriate term.
3. In the United States and in most countries, pesticides must be registered by the federal government and used in a manner consistent with the label instructions. Code officials' approvals are appropriate to limit the use of pesticides that may be consistent with the label.
4. The specification of spraying and fumigating suggests that those methods are preferred over other methods and may be interpreted as a requirement. However, current research indicates that many pests are more effectively controlled by baits containing pesticides or insect growth regulators. Spraying and fumigating are not particularly effective methods for controlling rodents and cockroaches, and exposure to pesticides through spraying and fumigation endangers human health. See Comparison of Costs and Effectiveness for Cockroach Control Case Study at http://www.healthyhometraining.org/ipm/Case_Study_Costs_DRAFT.pdf to compare the latest research.

The proposed language addresses these shortcomings by adding water to the list of materials that should be inaccessible; by using updated terms, by requiring compliance with the label instructions, and by setting performance standards for the selection of the pesticide. The pesticide needs to effectively control the pest and reduce exposure to occupants. Exposure is a reasonable surrogate for risk to occupants and is more easily assessed by a code inspector.

Cost Impact: The code change proposal will not increase the cost of construction. If implemented, it should reduce the costs of maintaining and operating existing buildings.

Committee Action:

Disapproved

Committee Reason: The committee indicated that requiring the code official to review label information and require use of specific elimination methods was beyond the scope of what the code official should be doing. Further, there was concern that requirements were contained within the definition and that perhaps these requirements would be better located in Chapter 3.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Tom Neltner, National Center for Healthy Housing and Alliance for Healthy Homes, requests Approval as Modified by this public comment.

~~**EXTERMINATION PEST ELIMINATION.** The control and elimination of insects, ~~rats~~ rodents or other pests by eliminating their harborage places; by removing or making inaccessible materials that serve as their food or water; by trapping; and, when necessary, by use of registered pesticides consistent with label instructions in a manner that effectively controls the pest with the lowest exposure to occupants other approved pest elimination methods.~~

Replace the term "Extermination" with "Pest Elimination" in Sections 302.5, 308.1, 308.2, 308.3, 308.4, and 308.5 of the *International Property Maintenance Code*.

Commenter's Reason: The proposed modification addresses these concerns in the following ways:

- 1. Does not require the code official to review label information; and
- 2. Does not require use of specific elimination methods beyond broad categories already in the current definition that deal with harborage, nourishment, and treatment.

The proposed modification also:

- 1. Changes the name from "Extermination" to "Pest Elimination" to more accurately reflect the purpose of the definition. The definition uses the word elimination three times. Extermination implies that pests must be killed rather than prevented. Pest elimination includes both prevention and extermination, and is more efficient and effective.
- 2. Eliminates references to specific elimination methods such as poison spraying, fumigating and trapping for the following reasons:
 - a. Keeping these in the code implies that these three methods are approved pest elimination methods. Fumigating is a specialized method used by licensed pest control operators in extraordinary circumstances, usually for mold or especially difficult to control insects in structures with pervasive infestations. Fumigating does not include total release foggers, commonly known as "bug bombs." Poison spraying is not an approved method for rodent control. For cockroaches, research by Purdue University, Virginia Tech University and North Carolina State University makes it clear that it is poison spraying is not an effective elimination method. See www.healthyhomestraining.org/ipm/Studies.htm.
 - b. The list of methods does not include baiting. Baiting is the common pest control method for the control of common structural pests such as ants, cockroaches, rodents, and other pests because it is more effective than the methods listed. See www.healthyhomestraining.org/ipm.
- 3. Adds water to complement food as materials that need to be removed or made inaccessible. Rodents and insects need water or moisture on a more frequent basis than food. They can use wet building materials as food; therefore moisture control as important method.
- 4. Changes "rats" to "rodents" because rats are only one important type of pest. Mice are also significant and exacerbate asthma. Therefore, rodent is a more appropriate term.

Final Action: AS AM AMPC____ D

**PM4-07/08
304.2.1 (New)**

Proposed Change as Submitted:

Proponent: Jane Malone, Alliance for Healthy Homes, representing Alliance for Healthy Homes and National Center for Healthy Housing

Add new text as follows:

304.2.1 Lead-based paint. Deteriorated paint on the exterior of property built before lead-based paint was banned shall be repaired using approved lead-safe work practices, unless documentation exists that the paint does not contain lead. The following repair methods shall not be used on painted surfaces: open flame burning or torching; machine sanding, machine grinding, abrasive blasting or sandblasting without a high-efficiency particulate air (HEPA)

local exhaust control; heat guns operating above 1100 degrees Fahrenheit or charring the paint; dry sanding; dry scraping except in conjunction with heat guns or within 1.0 ft. of electrical outlets or when treating defective paint totaling no more than 10 sq. ft. on any one interior surface; and paint stripping using a solvent that contains methylene chloride without enclosure.

Exceptions:

1. Property built after lead-based paint was banned.
2. Painted surfaces proven to contain no lead-based paint.

Reason: The purpose of this proposed addition to Code requirements for the surfaces of the exterior structure is to incorporate measures that reflect current knowledge about managing lead-based paint and thereby prevent lead poisoning. These changes would require, only in properties likely to contain lead-based paint, safe repair of deteriorated paint that is likely to contain lead. 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.

The current Code fails to specifically require, in older properties 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 subsection 304.2's requirement to repair peeling, flaking, and chipped paint. The proposal improves the current Code by adding a health-protective requirement to perform the repair safely around lead-based paint. The addition of the proposed sub-section will protect children from lead poisoning by specifying the use of approved lead safe work practices in making the required repairs and prohibiting extremely dangerous methods of paint repair. "Approved" lead-safe work practices may include established methods promulgated by federal agencies and standards bodies.

The proposed new sub-sub-section contains two exceptions to the requirement: properties built after lead was banned from paint used in residential properties (1977 US; earlier in some US cities; 1909 France, Belgium, Austria), and where the deteriorated paint has been documented to not contain lead (such as by a lead-based paint inspection or risk assessment, or through completion of another government-approved test method or ANSI standard).

Cost Impact: The code change proposal will increase the cost of construction.

Committee Action:

Disapproved

Committee Reason: The committee felt that the enforcement of these provisions would be difficult because other agencies already have minimum lead paint practices in place. Further, the committee indicated that some of the listed repair methods required definitions in order to be fully understood and enforceable.

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, Alliance for Healthy Homes, representing Alliance for Healthy Homes and National Center for Healthy Housing, requests Approval as Modified by this public comment.

Modify proposal as follows:

~~**304.2.1 Lead-based paint Pre-1978 buildings.** Deteriorated paint on the exterior of property built before lead-based paint was banned 1978 shall be repaired using approved lead safe work practices, unless documentation exists that the paint does not contain lead in accordance with the work practice standards for renovations in 40 CFR 745.85(a), unless documentation exists that the paint does not contain lead. The following repair methods shall not be used on painted surfaces: open flame burning or torching; machine sanding, machine grinding, abrasive blasting or sandblasting without a high efficiency particulate air (HEPA) local exhaust control; heat guns operating above 1100 degrees Fahrenheit or charring the paint; dry sanding; dry scraping except in conjunction with heat guns or within 1.0 ft. of electrical outlets or when treating defective paint totaling no more than 10 sq. ft. on any one interior surface; and paint stripping using a solvent that contains methylene chloride without enclosure.~~

Exceptions:

1. Property built after 1977, when lead-based paint was banned.
2. Painted surfaces proven to contain no lead-based paint.

Commenter's Reason: Responses to "other agencies already have minimum lead-based paint practices in place:"

1. The proposed new subsection 304.2.1 has been re-titled from "lead-based paint" to "pre-1978 buildings" to clarify that the proposed provision refers to interior surfaces in pre-1978 buildings not all lead-based paint issues.
2. There is no overlap with or conflict between the proposed provision 304.2.1 and state programs regulating lead-based paint abatement, because abatement involves removal of paint whether or not it is deteriorated, solely because it contains lead. Safely repairing deteriorated paint is an essential maintenance function unrelated to abatement. If adopted, the proposed provision will help property owners to avoid costly abatement ordered by a health agency after a child is lead-poisoned.

3. The jurisdictions where the property maintenance code requires repair of deteriorated paint using safe practices will be able to conform to the proposed provision 304.2.1.

Considering the committee's comments about definitions:

1. Work practices: Since the code change hearing in February, the U.S. Environmental Protection Agency published its final Renovation, Repair and Painting rule. The requirements of this rule will become well-known in the coming months since they will apply to millions of property maintenance activities conducted in pre-1978 homes and child-occupied facilities effective April 22, 2010. At 40 CFR 745.85(a), the rule provides thorough instructions for, work practice standards for the safe repair of deteriorated paint. In this modified proposed section 304.2.1, we propose to incorporate these standards by reference since they are understandable and enforceable. In addition, since these standards specify dangerous practices, it will not be necessary to list them in the code as previously proposed.
2. Lead-based paint: With the adoption of PM 19 as revised, the code will contain a definition of lead that will permit understanding and enforcement of the modified proposed section 304.2.1.

The purpose of the proposed addition to Code requirements for the surfaces of the exterior structure is to incorporate measures that reflect current knowledge about managing lead-based paint and excessive moisture and thereby prevent lead poisoning and mold. 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.

The proposed addition to section 304.2 is necessary because the existing code fails to specifically require, in older properties 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 subsection 304.2's requirement to repair peeling, flaking and chipped paint. The proposal improves the current Code by adding a health-protective requirement to perform the repair safely using work practice standards. The proposed new sub-section contains two exceptions to the requirement: properties built before 1978 and where the deteriorated paint has been documented to not contain lead (such as by a lead-based paint inspection or risk assessment or through completion of another government-approved test method or ANSI standard).

Final Action: AS AM AMPC____ D

PM6-07/08

305.3, 305.3.1 (New)

Proposed Change as Submitted:

Proponent: Jane Malone, Alliance for Healthy Homes, representing Alliance for Healthy Homes and National Center for Healthy Housing

1. 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. If moisture is the cause of paint deterioration or other defective surface conditions, the cause of the moisture shall be corrected.

2. Add new text as follows:

305.3.1 Lead-based paint. Deteriorated paint in property built before lead-based paint was banned shall be repaired using approved lead-safe work practices, unless documentation exists that the paint does not contain lead. The following repair methods shall not be used on painted surfaces: open flame burning or torching; machine sanding, machine grinding, abrasive blasting or sandblasting without a high-efficiency particulate air (HEPA) local exhaust control; heat guns operating above 1100 degrees Fahrenheit or charring the paint; dry sanding; dry scraping except in conjunction with heat guns or within 1.0 ft. of electrical outlets or when treating defective paint totaling no more than 2 sq. ft. in any one interior room or space; and paint stripping using a solvent that contains methylene chloride without powered mechanical ventilation.

Exceptions:

1. Property built after lead-based paint was banned
2. Painted surfaces proven to contain no lead-based paint

Reason: The purpose of this proposed addition to Code requirements for the surfaces of the interior structure is to incorporate measures that reflect current knowledge about managing lead-based paint and excessive moisture and thereby prevent lead poisoning and mold. These changes would require the correction of underlying moisture problems in all properties, and, require, only in properties likely to contain lead-based paint, safe repair of deteriorated paint that is likely to contain lead. 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.

The current Code is inadequate by failing to specifically require correction of surface evidence of a moisture problem. The first change requires repair of underlying moisture problem: "If moisture is the cause of paint deterioration or other defective surface conditions, the cause of the moisture shall be corrected." The result of this requirement will be prevention of paint deterioration, which is hazardous in older property that may contain lead-based paint, as well as the cessation of moisture problems in wall coverings and other building materials that can lead to mold, infestation, and structural problems in any property.

305.3.1: The current Code fails to specifically require, in older properties 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 subsection 305.3's requirement to repair peeling, chipping, flaking or abraded paint. The proposal improves the current Code by adding 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 sub-subsection will protect children from lead poisoning by specifying the use of approved lead safe work practices in making the required repairs and prohibiting extremely dangerous methods of paint repair. "Approved" lead-safe work practices may include established methods promulgated by federal agencies and standards bodies.

The proposed new sub-sub-section contains two exceptions to the requirement: properties built after lead was banned from paint used in residential properties (1977 US; earlier in some US cities; 1909 France, Belgium, Austria), and where the deteriorated paint has been documented to not contain lead (such as by a lead-based paint inspection or risk assessment, or through completion of another government-approved test method or ANSI standard).

Cost Impact: The code change proposal will increase the cost of construction.

Committee Action:

Disapproved

Committee Reason: Consistent with the committee's action on PM4-07/08, the committee felt that the enforcement of these provisions would be difficult because other agencies already have minimum lead paint practices in place. Further, the committee indicated that some of the repair methods required definitions in order to be understood and unenforceable.

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, Alliance for Healthy Homes, representing Alliance for Healthy Homes and National Center for Healthy Housing, requests Approval as Modified by this public comment.

Modify 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. If moisture is the cause of paint deterioration or other defective surface conditions, the cause of the moisture shall be corrected.

305.3.1 Lead-based paint Pre-1978 buildings. Deteriorated paint in property built before lead-based paint was banned 1978 shall be repaired using approved lead-safe work practices, unless documentation exists that the paint does not contain lead in accordance with the work practice standards for renovations required in 40 CFR 745.85(a), unless documentation exists that the paint does not contain lead. The following repair methods shall not be used on painted surfaces: open flame burning or torching; machine sanding, machine grinding, abrasive blasting or sandblasting without a high efficiency particulate air (HEPA) local exhaust control; heat guns operating above 1100 degrees Fahrenheit or charring the paint; dry sanding; dry scraping except in conjunction with heat guns or within 1.0 ft. of electrical outlets or when treating defective paint totaling no more than 2 sq. ft. in any one interior room or space; and paint stripping using a solvent that contains methylene chloride without powered mechanical ventilation.

Exceptions:

1. Property built after 1977, when lead-based paint was banned
2. Painted surfaces proven to contain no lead-based paint

Commenter's Reason: Responses to "other agencies already have minimum lead-based paint practices in place:"

1. The proposed new subsection 305.3.1 has been re-titled from "lead-based paint" to "pre-1978 buildings" to clarify that the proposed provision refers to interior surfaces in pre-1978 buildings not all lead-based paint issues.
2. There is no overlap with or conflict between the proposed provision 305.3.1 and state programs regulating lead-based paint abatement, because abatement involves removal of paint whether or not it is deteriorated, solely because it contains lead. Safely repairing deteriorated paint is an essential maintenance function unrelated to abatement. If adopted, the proposed provision will help property owners to avoid costly abatement ordered by a health agency after a child is lead-poisoned.
3. The jurisdictions where the property maintenance code requires repair of deteriorated paint using safe practices will be able to conform to the proposed provision 305.3.1.

Considering the committee's comments about definitions:

1. Work practices: Since the code change hearing in February, the U.S. Environmental Protection Agency published its Renovation, Repair and Painting rule. The requirements of this rule will become well-known in the coming months since they will apply to millions of property maintenance activities conducted in pre-1978 homes and child-occupied facilities effective April 22, 2010. At 40 CFR 745.85(a), the rule

provides thorough instructions for work practice standards for the safe repair of deteriorated paint. In this modified proposed section 305.3.1, we propose to incorporate these standards by reference since they are understandable and enforceable. In addition, since these standards specify dangerous practices, it will not be necessary to list them in the code as previously proposed.

2. Lead-based paint: With the adoption of PM 19 as revised, the code will contain a definition of lead hazard that will permit understanding and enforcement of the modified proposed section 305.3.1.

The purpose of these proposed additions to Code requirements for the surfaces of the interior structure is to incorporate measures that reflect current knowledge about managing lead-based paint and excessive moisture and thereby prevent lead poisoning and mold. These changes would require the correction of underlying moisture problems in all properties, and, require, only in properties likely to contain lead-based paint, safe repair of deteriorated paint that is likely to contain lead. 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.

The proposed modification to Section 305.3 is necessary because the existing code fails to specifically require correction of surface evidence of a moisture problem. The proposed change requires repair of underlying moisture problem. In many cases, the moisture problem is obvious. This requirement will prevent paint deterioration, which is hazardous in older property that may contain lead-based paint, as well as stop moisture problems in wall coverings and other building materials that can lead to mold, infestation, and structural problems in any property.

The proposed addition of Section 305.3.1 is necessary because the current Code fails to specifically require, in older properties 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 subsection 305.3's requirement to repair peeling, chipping, flaking or abraded paint. The proposal improves the current Code by adding a health-protective requirement to perform the repair safely using work practice standards. The proposed new sub-section contains two exceptions to the requirement: properties built before 1978 and where the deteriorated paint has been documented to not contain lead (such as by a lead-based paint inspection or risk assessment or through completion of another government-approved test method or ANSI standard).

Final Action: AS AM AMPC___ D

PM7-07/08

505.4 (New)

Proposed Change as Submitted:

Proponent: Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes

Add new text as follows:

505.4 Carbon monoxide alarms. Every dwelling unit with an attached garage or fuel burning furnace, water heater, or appliance shall install a carbon monoxide alarm. The alarm should be installed according to the manufactures instructions.

Reason: Carbon monoxide is an odorless, tasteless, invisible gas that kills more than 200 people in homes each year. Thousands more go to the hospital with carbon monoxide poisoning. People in all regions of the country experience carbon monoxide poisoning.

After several revisions directed by the Consumer Products Safety Commission and Underwriters Laboratory, carbon monoxide alarms now reliably and cost effectively warn residents of the presence of life threatening levels of carbon monoxide. The alarms cost about \$25 each.

At least 12 states and many more communities in the U.S. mandate the use of carbon monoxide alarms.

Cost Impact: The code change proposal will increase the cost of construction. In existing buildings, it will require the installation of alarms in homes with gas appliances, thereby increasing costs for property owners.

Committee Action:

Disapproved

Committee Reason: The committee indicated that requiring carbon monoxide alarms retroactively could burden municipalities with respect to enforcement and inspections. Further, this requirement is beyond the requirements for new construction in the International Residential Code and is therefore not appropriate for existing structures.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment 1:

Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes, requests Approval as Modified by this public comment.

Modify proposal as follows:

505.4 Carbon monoxide alarms. Every dwelling unit with an attached garage or fuel burning furnace, water heater, or appliance shall ~~install~~ have a carbon monoxide alarm. ~~The alarm should be installed according to the manufactures instructions.~~

Commenter's Reason: The proposed modifications address the committee's concerns by replacing the word "install" with "have." The word "install" implied that the alarm needed to be part of construction. Instead, the alarms can be easily added to any home and need to be replaced every few years. They can be plugged into any outlet and do not need to be hard-wired. No structural changes are needed.

This provision will also allow the jurisdiction to align its property maintenance code with state and local laws that require carbon monoxide alarms. Twelve states and more than 100 communities have retroactively required carbon monoxide alarms in existing homes to save lives.

In addition, in rental property the requirement would be self-implementing since most state landlord-tenant laws require compliance with housing and property maintenance codes as a condition of all residential leases.

Carbon monoxide is an odorless, tasteless, invisible gas that kills more than 200 people in homes each year. Thousands more go to the hospital with carbon monoxide poisoning. People in all regions of the country experience carbon monoxide poisoning. After several revisions directed by the Consumer Products Safety Commission, carbon monoxide alarms now reliably and cost effectively warn residents of the presence of life threatening levels of carbon monoxide. The alarms cost about \$25 each.

Public Comment 2:

Ted A. Williams, American Gas Association, requests Disapproval.

Commenter's Reason: The Committee correctly disapproved this proposal. In addition to the Committee Reason cited, this proposal is inconsistent with the recommendation of the ICC Code Technology Committee (CTC) (<http://www.iccsafe.org/cs/cc/ctc/Carbon.html>):

"Recommendation: The CTC recommendation is: There has not been sufficient justification presented to the CTC to mandate carbon monoxide alarms in new and existing residential type occupancies...In making this recommendation, the CTC notes the importance of and the need for compliance with the applicable code provisions for equipment maintenance and compliance with equipment installation instructions to control the hazards associated with CO emissions."

No testimony was provided that would refute the CTC recommendation. If the proponents believe that this is a matter requiring ICC code coverage, they should take this up with the CTC for further consideration.

Final Action: AS AM AMPC___ D

PM12-07/08

502.5 (New)

Proposed Change as Submitted:

Proponent: Paul Rimel, City of Staunton, VA, representing American Restroom Association

Add new text as follows:

502.5 Public toilet facilities and signage. Required public toilet facilities and public toilet facility signage shall be maintained in accordance with a building or structures certificate of occupancy. Signage denying public access to such required facilities shall be prohibited.

Reason: The purpose of the new code section is to provide much needed clarification regarding availability of required public toilet facilities. Even though the International Plumbing Code sets forth specific requirements regarding required public toilet facilities, the International Property Maintenance Code is conspicuously silent on the issue. IPMC Section 502.4 states the minimum requirements for employee facilities, but no language regarding required public toilet facilities currently exists in the IPMC. Even Section 506.3, requiring maintenance of grease interceptors, was added to the IPMC 2007 Supplement. Public toilet facilities and signage, required as a condition of the certificate of occupancy, should be acknowledged by the IPMC to ensure continued availability to the general public. Posting of signage containing language such as "No Public Restrooms" should not be permitted. Non-availability of public restroom facilities is widespread throughout the country and a public outcry for unrestricted access to adequate, sanitary restroom facilities is growing.

Based on a Wall Street Journal/American Restroom Association investigation ⁽¹⁾, customers and building visitors are often told there are no toilet facilities; or they find the restrooms are locked and are told the facilities are for employees' only. This is at variance with the intent of IPC 403.4 'Public Facilities' which states 'customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization'. To address this problem the IPC added Section 403.5.1 Directional Signs. These sign(s) will among other things, educate both the public and the business owners, making it more likely that the intent of IPC Sect 403 is satisfied. It is important that the mandated minimum toilet facilities be kept open and that the signs not be removed during the operation phase of any buildings life cycle.

(1) Wall Street Journal 'Bathroom Backlash Arrives on Main Street ' July 26, 2005

Cost Impact: The code change proposal will not increase the cost of construction.

Committee Action: **Disapproved**

Committee Reason: Signage for required public toilet facilities and a buildings certificate of occupancy should not be related; therefore this proposal is inappropriate.

Assembly Action: **None**

Individual Consideration Agenda

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

Public Comment 1:

Paul Rimel, City of Staunton, VA, representing American Restroom Association, requests Approval as Modified by this public comment.

Modify proposal as follows:

502.5 Public toilet facilities and signage. Required public toilet facilities and public toilet facility signage shall be maintained ~~in accordance with a building or structures certificate of occupancy.~~ Signage denying public access to such required facilities shall be prohibited.

Commenter's Reason: The proposed modification addresses the committee's concern regarding signage for required public toilet facilities being related to a building's certificate of occupancy.

Public Comment 2:

Guy Tomberlin, Fairfax County, VA, representing Virginia Plumbing and Mechanical Inspectors Association (VPMIA) and Virginia Building and Code Officials Association (VBCOA), requests Approval as Modified by this public comment.

Modify proposal as follows:

502.5 Public toilet facilities and signage. ~~Required Public toilet facilities and public toilet facility signage shall be maintained in a safe sanitary and working condition in accordance with a building or structures certificate of occupancy. Signage denying public access to such required facilities shall be prohibited the International Plumbing Code. Except for periodic maintenance or cleaning, public access and use shall be provided to the toilet facilities at all times during occupancy of the premises.~~

Commenter's Reason: The modified language is consistent with current wording in Sections 301.2 and 603.1 and other sections of the IPMC. As proposed the correct signage will have to remain in place and use granted to the public at all times exactly as intended.

Final Action: AS AM AMPC____ D

PM13-07/08

503.4

Proposed Change as Submitted:

Proponent: Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes

Revise as follows:

503.4 Floor surface. In other than single family dwelling units, every bathroom and toilet room floor shall be maintained to be a smooth, hard, nonabsorbent surface to permit such floor to be easily kept in a clean and sanitary condition.

Reason: The proposal expands the requirement for smooth, hard, nonabsorbent surfaces in two ways. First, it extends the requirement to dwelling units. Sanitation concerns are present and significant in dwellings since human waste can fall and accumulate on the floor surface. If the floor is not easily cleanable, the waste material will pose a serious health hazard. Installed carpeting is especially difficult to consistently maintain in a sanitary state. In addition, rooms with plumbing fixtures are likely to have water on the floor either from condensation or equipment failures. On a nonabsorbent surface, water is difficult to remove in a timely and effective manner and may result in mold growth. The moisture may attract insects and rodents. It may also rot the underlying floor.

Second, the proposal extends the requirements to bathrooms that have a shower or bathtub but no toilet. In this circumstance, sanitation concerns are still significant. If the floor surface is not smooth and cleanable, bacteria and fungus will not be removed.

On a nonabsorbent surface, water is difficult to remove in a timely and effective manner and may result in mold growth. The moisture may attract insects and rodents. It may also rot the underlying floor.

Surfaces that are difficult to clean are especially problematic for residential rental properties since tenants may lack the resources and equipment to maintain a carpeted floor in a bathroom or toilet room or lack the authority to replace it.

For these reasons, all codes should address the issue of floor surfaces require smooth, hard, nonabsorbent surfaces in bathrooms and toilet rooms.

Cost Impact: The code change proposal will increase the cost of construction.

The proposal will require the use of cleanable surfaces in bathrooms without a toilet and in residences. Most new construction does not use carpets in these rooms. Where they do, the cost differential depends on the type of alternative flooring selected. For example, linoleum is a low cost alternative that is smooth and cleanable. In existing construction, the code change would require the removal and replacement with an alternate flooring option in these rooms. This change will initially increase the cost of maintenance but should reduce the costs in the long-run considering potential substrate failure.

Committee Action:

Disapproved

Committee Reason: Extending these floor surface requirements to dwelling units would not be appropriate and as the proposal is written would prohibit the use of typical non-permanent carpeted bathroom mats in dwelling units, other than single family dwelling units.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes, requests Approval as Modified by this public comment.

Modify proposal as follows:

503.4 Floor surface. In other than single family dwelling units, every bathroom and toilet room floor shall be maintained to be a smooth, hard, nonabsorbent surface to permit such floor to be easily kept in a clean and sanitary condition.

Exception: Non-permanent bathroom mats.

Commenter's Reason: The proposed modification addresses the Committee's reason for disapproval by exempting non-permanent bathroom mats from the provision.

The proposal expands the requirement for smooth, hard, nonabsorbent surfaces in two ways. First, it extends the requirement to dwelling units. Sanitation concerns are present and significant in dwellings since human waste can fall and accumulate on the floor surface. If the floor is not easily cleanable, the waste material will pose a serious health hazard. Installed carpeting is especially difficult to consistently maintain in a sanitary state. In addition, rooms with plumbing fixtures are likely to have water on the floor either from condensation or equipment failures. On a non-absorbent surface, water is difficult to remove in a timely and effective manner and may result in mold growth. The moisture may attract insects and rodents. It may also rot the underlying floor.

Second, the proposal extends the requirements to bathrooms that have a shower or bathtub but no toilet. In this circumstance, sanitation concerns are still significant. If the floor surface is not smooth and cleanable, bacteria and fungus will not be removed. On a nonabsorbent surface, water is difficult to remove in a timely and effective manner and may result in mold growth. The moisture may attract insects and rodents. It may also rot the underlying floor.

Surfaces that are difficult to clean are especially problematic for residential rental properties since tenants may lack the resources and equipment to maintain a carpeted floor in a bathroom or toilet room or lack the authority to replace it.

For these reasons, the International Property Maintenance Code (IPMC) should address the issue of floor surfaces require smooth, hard, nonabsorbent surfaces in bathrooms and toilet rooms.

This type of provision is common for existing housing codes in communities across the country as a basic requirement for public health and sanitation. The IPMC should be a model for jurisdictions to consider and adapt as they deem appropriate for their needs.

Final Action: AS AM AMPC____ D

PM14-07/08

505.4

Proposed Change as Submitted:

Proponent: Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes

Revise as follows:

505.4 Water heating facilities. Water heating facilities shall be properly installed, maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a temperature of not less than 110°F (43°C). A gas-burning water heater shall not be located in any bathroom, toilet room, bedroom or other occupied room normally kept closed, unless adequate combustion air is provided. An approved combination temperature and pressure-relief valve and relief valve discharge pipe shall be properly installed and maintained on water heaters. In dwelling units, the temperature of the water at the spout in a bathtub or shower shall not exceed 120°F (49°C).

Reason: The current code does not set a maximum water temperature for bathtubs and showers. However, the American Society of Sanitary Engineering recommends a maximum mixed water temperature setting of 120°F (49°C).

According to the Consumer Products Safety Commission, "Each year, approximately 3,800 injuries and 34 deaths occur in the home due to scalding from excessively hot tap water. The majority of these injuries involve the elderly and children under the age of five. The U.S. Consumer Product Safety Commission (CPSC) urges all users to lower their water heaters to 120 degrees Fahrenheit. In addition to preventing injuries, this decrease in temperature will conserve energy and save money.

CPSC goes on to state "Most adults will suffer third-degree burns if exposed to 150 degree water for two seconds. Burns will also occur with a six-second exposure to 140 degree water or with a thirty second exposure to 130 degree water. Even if the temperature is 120 degrees, a five minute exposure could result in third-degree burns." See www.cpsc.gov/CPSCPUB/PUBS/5098.pdf

Cost Impact: The code change proposal will not increase the cost of construction. Because this proposal involves only an adjustment to the temperature settings for hot water in residences, it is not expected to result in new costs.

Committee Action:

Disapproved

Committee Reason: Retroactive requirements for temperature limiting devices within dwelling units would become an enforcement and inspection issue for many jurisdictions with respect to budgeting and personnel constraints.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Tom Neltner, National Center for Healthy Housing, representing National Center for Healthy Housing and Alliance for Healthy Homes, requests Approval as Modified by this public comment.

Modify proposal as follows:

505.4 Water heating facilities. Water heating facilities shall be properly installed, maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a temperature of not less than 110°F (43°C). A gas-burning water heater shall not be located in any bathroom, toilet room, bedroom or other occupied room normally kept closed, unless adequate combustion air is provided. An approved combination temperature and pressure-relief valve and relief valve discharge pipe shall be properly installed and maintained on water heaters. In dwelling units, the hot water supplied to tubs, whirlpool bathtubs, showers and tub-shower combinations shall be maintained at a maximum temperature of the water at the spout in a bathtub or shower shall not exceed 120°F (49°C) by a water temperature limiting device that conforms to either ASSE 1070 or ASSE 1016.

Commenter's Reason: The current version of the International Residential Code requires the use of water temperature limiting devices. Sections P2708.3 and P2713.3 of the International Residential Code require the use of a device that conforms to American Society of Safety Engineers (ASSE) 1070 or 1016 standards for tubs, whirlpool bathtubs, showers and tub-shower combinations as appropriate. The devices must limit water temperature to a maximum of 120°F (49°C).

The ASSE 1016 standard covers the delivery of water to individual fixtures that are adjusted and controlled by the user. The ASSE 1070 standard covers the control of maximum temperature to a fixture or group of fixtures. These standards allow the maximum temperature to be set at 120°F (49°C) at the bathtub or shower where scalding is most likely to cause injury and/or death.

According to the Consumer Products Safety Commission, "Each year, approximately 3,800 injuries and 34 deaths occur in the home due to scalding from excessively hot tap water. The majority of these injuries involve the elderly and children under the age of five. The U.S. Consumer Product Safety Commission (CPSC) urges all users to lower their water heaters to 120 degrees Fahrenheit."

CPSC goes on to state "Most adults will suffer third-degree burns if exposed to 150 degree water for two seconds. Burns will also occur with a six-second exposure to 140 degree water or with a thirty second exposure to 130 degree water. Even if the temperature is 120 degrees, a five minute exposure could result in third-degree burns." See www.cpsc.gov/CPSCPUB/PUBS/5098.pdf

In addition to preventing injuries, this decrease in temperature will conserve energy and save money.

This change is important because the current International Property Maintenance Code (IPMC) sets a minimum temperature of 110°F (43°C) but does not set a maximum temperature. Without the provision, local jurisdictions will not have the specific language they need from a model code to adopt the provision in their community.

Regarding the committee's concern that requiring these devices would put a burden on the jurisdiction with respect to enforcement and inspection, the jurisdiction has the option to select which provisions of the model IPMC to adopt. It could choose not to require the devices or require incorporation of the devices for certain types of housing. If the jurisdiction chooses to prevent the injuries to children and the elderly and conserve energy by limiting the maximum temperature, it needs the specific language in the model code.

In addition, in rental property the requirement would be self-implementing since most state landlord-tenant laws require compliance with housing and property maintenance codes as a condition of all residential leases.

Final Action: AS AM AMPC____ D

PM16-07/08

604.3.1 (New), 604.3.1.1 (New), 604.3.2 (New), 604.3.2.1 (New)

Proposed Change as Submitted:

Proponent: Wayne R. Jewell, City of Southfield, representing Hazard Abatement in Existing Buildings Committee

Add new text as follows:

604.3.1 Abatement of electrical hazards associated with water exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to water.

604.3.1.1 Electrical equipment. Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, luminaries, ballasts, motors and electronic control, signaling and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following equipment shall be allowed to be repaired where an inspection report from the equipment manufacturer or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Enclosed switches, rated 600 Volts or less
2. Busway, rated 600 Volts or less
3. Panelboards, rated 600 Volts or less
4. Switchboards, rated 600 Volts or less
5. Fire pump controllers, rated 600 Volts or less
6. Manual and magnetic motor controllers
7. Motor control centers
8. Alternating current high-voltage circuit breakers
9. Low voltage power circuit breakers
10. Protective relays, meters, and current transformers
11. Low and medium voltage switchgear
12. Liquid-filled transformers
13. Cast-resin transformers
14. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water.
15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water.
16. Luminaires that are listed as submersible
17. Motors
18. Electronic control, signaling and communication equipment

604.3.2 Abatement of electrical hazards associated with fire exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to fire.

604.3.2.1 Electrical equipment. Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been exposed to fire shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Electrical switches, receptacles and fixtures that shall be allowed to be repaired where an inspection report from the equipment manufacturer or approved manufacturer's representative indicates that the equipment have not sustained damage that requires replacement.

Reason: The ICC Board approved the development of new code requirements in the I-Codes which address hazards, such as those from fire, as well as, the development of requirements relative to issues such as hazardous conditions due to structural issues. This would provide code requirements for all disciplines to be used by building owners to bring their existing building stock up to minimum standards and enforcing agencies when performing inspections of existing buildings. The Hazard Abatement of Existing Buildings Committee (HAEB) was formed to develop these requirements.

During this 07/08 cycle, the HAEB committee is proposing several unsafe conditions requirements for inclusion within the text of the existing International Codes, predominately the *International Property Maintenance Code* and the *International Fire Code*.

During the 06/07 cycle, the committee proposed this as an appendix in the International Fire Code. Based on comments received from the Code Committee as well as the membership, this committee has decided that these requirements would be better placed in the Property Maintenance Code. Also, the requirements have been consolidated as compared to the original proposal in 06/07 to facilitate enforcement.

The purpose of this proposal is to provide enforceable provisions to the code official that address hazards in electrical equipment that has been exposed to water or fire. These provisions are derived from a publication entitled "Guidelines for Handling Water-Damaged Electrical Equipment," published by the National Electrical Manufacturers Association (NEMA). The NEMA document could not be directly referenced as it does not meet the ICC requirements for referenced standards. The document is not maintained under a consensus process and is not written in mandatory enforceable language.

A section-by-section discussion follows:

604.3.1: This section defines the scope of the section as pertaining to electrical equipment and systems that have been exposed to water.

604.3.1.1: This section describes conditions upon which electrical equipment must be replaced. Protective components, such as circuit breakers, overload relays, low voltage or medium voltage protective devices within a switchgear assembly, and fuses are necessary for the safe operation of the distribution circuits and should be replaced when exposed to water. The ability of a transformer to operate as intended can be impaired by corrosion to the transformer core, flood debris deposited inside the transformer, or contamination of the transformer fluid. The exception to this section allows for repair of certain components of an electrical distribution system and certain electrical equipment provided that an inspection report from the equipment manufacturer or approved manufacturer's representative is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement.

604.3.2: This section defines the scope of the section as pertaining to electrical equipment and systems that have been exposed to fire.

604.3.2.1: This section describes conditions upon which electrical components and equipment must be replaced, where they have been exposed to fire. The ability of electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, to operate as intended can be impaired by exposure to fire. The exception to this section allows for repair of these components provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement.

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

Committee Action:

Approved as Modified

Modify the proposal as follows:

604.3.1.1 Electrical equipment. Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, molded case circuit breakers, low voltage fuses, luminaries, ballasts, motors and electronic control, signaling and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following equipment shall be allowed to be repaired where an inspection report from the equipment manufacturer or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Enclosed switches, rated 600 Volts or less
2. Busway, rated 600 Volts or less
3. Panelboards, rated 600 Volts or less
4. Switchboards, rated 600 Volts or less
5. Fire pump controllers, rated 600 Volts or less
6. Manual and magnetic motor controllers
7. Motor control centers
8. Alternating current high-voltage circuit breakers
9. Low voltage power circuit breakers
10. Protective relays, meters, and current transformers
11. Low and medium voltage switchgear
12. Liquid-filled transformers
13. Cast-resin transformers
14. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water.
15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water.
16. Luminaires that are listed as submersible
17. Motors
18. Electronic control, signaling and communication equipment

(Portions of proposal not shown remain unchanged)

Committee Reason: The committee agreed that providing enforceable provisions to the code official that address hazards in electrical equipment that has been exposed to water or fire was appropriate. The committee further agreed that the two items added by the modification also required replacement when exposed to water and were therefore appropriate to add.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Lawrence Brown, CBO, National Association of Home Builders, requests Approval as Modified by this public comment.

Further modify proposal as follows:

604.3.1.1 Electrical equipment. Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, molded case circuit breakers, low voltage fuses, luminaries, ballasts, motors and electronic control, signaling and communication equipment that have been ~~exposed to~~ damaged by water shall be replaced in accordance with the provisions of the *International Building Code*.

604.3.2 Abatement of electrical hazards associated with fire exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been ~~exposed to~~ damaged by fire.

604.3.2.1 Electrical equipment. Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been ~~exposed to~~ damaged by fire shall be replaced in accordance with the provisions of the *International Building Code*.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: This modification is to correlate with the term "damaged" used in the two Exceptions of this provision (i.e., "...equipment has not sustained damage that requires replacement"). In addition, the term "exposed to" would be arbitrary in the enforcement of this provision. A mere slight "exposure" to fire or water, or the exposure to these conditions where the equipment is actually rated for these conditions (e.g., weather resistance electrical equipment), would not warrant the "repair" or "replacement" of the equipment.

Final Action: AS AM AMPC_____ D

PM19-07/08

Chapter 8 (New)

Proposed Change as Submitted:

Proponent: Wayne R. Jewell, City of Southfield, representing Hazard Abatement in Existing Buildings Committee

Add new chapter as follows:

CHAPTER 8 **HEALTH AND SANITATION**

SECTION 801 **GENERAL**

801.1 Scope. The provisions of this chapter shall govern the minimum health and sanitation required to occupy a structure.

801.2 Responsibility. The owner of the structure shall provide and maintain the health and sanitation of the structure, premises or portion thereof in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any structure or premises which does not comply with the requirements of this chapter.

SECTION 802 **GENERAL REQUIREMENTS FOR MAINTAINING HEALTH AND SANITATION**

802.1 Performance of structure, premises or portion thereof. Elements and components of a structure, premises or portion thereof shall be maintained in accordance with this section to provide a healthy and sanitary condition and shall not be allowed to deteriorated to an extent so as to pose a threat to the public health, safety or welfare. Where elements and components of the structure, premises or portion thereof are determined to be unsafe shall be replaced or repaired according to Section 802.2.

802.2 Elements and components. Elements and components of a structure, premises or portion thereof determined to be unsafe shall be replaced or repaired by the owner according to the provisions of the *International Building Code* or *International Existing Building Code*.

Exception: Where repair of the element or component to its original sanitary and health standards will not pose a threat to the public health, safety or welfare.

802.2.1 Equipment. Equipment associated with a structure, premises or portion thereof that poses a threat to public health, safety or welfare, shall be determined to be unsafe and shall be replaced or repaired according to the provisions of Section 802.2.

802.3 Health and sanitary conditions. The conditions described below shall be determined as unsafe and shall be mitigated in an approved manner.

1. Asbestos in insulation, siding, roofing, or other materials where the asbestos has become or is liable to become friable.
2. Carbon Monoxide at levels that exceed any of the following:
 - 2.1. 100 milligrams per cubic meter (90 parts per million) for 15 minutes;
 - 2.2. 60 milligrams per cubic meter (50 parts per million) for 30 minutes;
 - 2.3. 30 milligrams per cubic meter (25 parts per million) for 1 hour; or
 - 2.4. 10 milligrams per cubic meter (10 parts per million) for 8 hours.
3. Radon at levels that exceed four picocuries of radon per liter.
4. Lead under any of the following conditions:
 - 4.1. Peeling, flaking, chipping, cracking, or chalking paint on a dwelling unit built before 1960 unless the paint has been determined to have less than 0.5 percent or 1 milligram per square centimeter of lead;
 - 4.2. Lead dust at levels greater than 40 micrograms of lead per square foot on the floor;
 - 4.3. Lead dust at levels greater than 250 micrograms of lead per square foot on an interior window sill;
 - 4.4. Lead contamination in exposed soil at levels greater than 400 mg of lead per kilogram of soil in children's play areas or 1200 mg of lead per kilogram of soil in other areas.
5. Potable water contamination at levels that exceed the maximum contaminant levels established at 40 CFR 141.
6. Arsenic-treated lumber that:
 - 6.1. Shows evidence of splintering
 - 6.2. Shows evidence of burning or charring.

Reason: The ICC Board approved the development of new code requirements in the I-Codes which address hazards, such as those from fire, as well as, the development of requirements relative to issues such as hazardous conditions due to structural issues. This would provide code requirements for all disciplines to be used by building owners to bring their existing building stock up to minimum standards and enforcing agencies when performing inspections of existing buildings. The Hazard Abatement of Existing Buildings Committee (HAEB) was formed to develop these requirements.

During this 07/08 cycle, the HAEB committee is proposing several unsafe conditions requirements for inclusion within the text of the existing International Codes, predominately the *International Property Maintenance Code* and the *International Fire Code*.

Asbestos products were extensively used in building materials. They continue to be legal to sell and to use. Intact asbestos is not a hazard. It becomes a hazard when damaged or deteriorated and releases friable asbestos. See www.epa.gov/asbestos/pubs/ashome.html for details.

Carbon monoxide kills more than 200 people each year in their home in events not related to fires or suicide. Thousands more are hospitalized each year. The World Health Organization has determined that carbon monoxide levels in excess of the ones described in the proposal are unhealthy and can be dangerous. See www.euro.who.int/document/a/q/5_5carbonmonoxide.pdf.

Radon is the leading cause of lung cancer in people who have never smoked. U.S. Environmental Protection Agency (EPA) has established a recommended maximum exposure level of four picocuries of radon per liter of air in occupied areas. This level can be achieved through established technology in a cost effective manner. The radon controls also reduce moisture and soil gas intrusion. See www.epa.gov/radon/pubs/newconst.html.

Lead can cause permanent damage to a child's brain that is manifested as lower IQ levels, learning disorders and violent behavior. In adults, it can cause hypertension. EPA has determined that lead-based paint conditions described in the proposal are unhealthy and can be dangerous to children. See 40 CFR Part 745 Subpart D. Subsequent research confirms that children living a home at levels in excess of the lead dust levels have a 1 in 7 chance of being lead poisoned.

Drinking water contamination at levels that exceed the contaminant standards established by EPA are unhealthy and can be dangerous. See U.S EPA standard at 40 Code of Federal Regulations Part 141 or www.epa.gov/safewater/contaminants/index.html.

Wood treated with arsenic was produced until January 1, 2004. It remains in use in many outdoor applications. The risk is low if it is sealed, not burned and not liable to cause splinters. See www.cpsc.gov/phth/cca.html

Cost Impact: The code change proposal will increase the cost of construction.

Committee Action:

Disapproved

Committee Reason: The committee indicated that much of the proposed language, such as "liable to become friable" and "evidence of splintering" was vague and therefore unenforceable. Further, the committee felt that most code officials do not have the expertise or training to determine the conditions or levels described in the proposal; therefore the proposal should have language to require testing by the proper agency and the results reported to the code official.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Wayne R. Jewell, Chair, ICC Hazard Abatement in Existing Buildings Committee, requests Approval as Modified by this public comment.

Modify proposal as follows:

802.3 Health and sanitary conditions. The conditions described below shall be determined as unsafe and shall be mitigated in an approved manner.

1. Asbestos in insulation, siding, roofing, or other materials where the asbestos ~~has become or is liable to become~~ friable.
2. Carbon Monoxide at levels that exceed any of the following:
 - 2.1. 100 milligrams per cubic meter (90 parts per million) for 15 minutes;
 - 2.2. 60 milligrams per cubic meter (50 parts per million) for 30 minutes;
 - 2.3. 30 milligrams per cubic meter (25 parts per million) for 1 hour; or
 - 2.4. 10 milligrams per cubic meter (10 parts per million) for 8 hours.
3. Radon at levels that exceed four picocuries of radon per liter.
4. Lead under any of the following conditions:
 - 4.1. Peeling, flaking, chipping, cracking, or chalking paint on a dwelling unit built before 1960 unless the paint has been determined to have less than 0.5 percent or 1 milligram per square centimeter of lead;
 - 4.2. Lead dust at levels greater than 40 micrograms of lead per square foot on the floor;
 - 4.3. Lead dust at levels greater than 250 micrograms of lead per square foot on an interior window sill;
 - 4.4. Lead contamination in exposed soil at levels greater than 400 mg of lead per kilogram of soil in children's play areas or 1200 mg of lead per kilogram of soil in other areas.
5. Potable water contamination at levels that exceed ~~the maximum contaminant levels established at 40 CFR 141~~ that for potable water as defined by the International Plumbing Code.
6. Arsenic-treated lumber that:
 - 6.1. Shows evidence of splintering
 - 6.2. Shows evidence of burning or charring.

802.3.1 Written report. Where the conditions specified in Section 802.3 identify threshold levels, information shall be provided to the code official in accordance with Section 105.3.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: Considering the Committee's comments, changes are made that reflect some vague and unenforceable language. In addition, a reference was added setting out the condition for a report from an approved agency to validate conditions that indicate threshold levels of contaminants. In addition, instead of tying a water contamination to a federal standard (40CFR 141), it is more appropriate to tie to ANY contaminate that exceeds that allowed for potable water as defined by the International Plumbing Code.

Final Action: AS AM AMPC____ D
