2021 GROUP A PUBLIC COMMENT AGENDA

SEPTEMBER 21 - 28, 2021
DAVID L. LAWRENCE CONVENTION CENTER
PITTSBURGH, PA
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Property Maintenance Code

Add new text as follows:

303.3 Operations and Maintenance.
The operations and maintenance of public swimming pools and spas shall comply with PHTA 2.

Add new standard(s) as follows:

PHTA

PHTA ANSI/PHTA/ICC-2 2021
Standard for Public Pool and Spa Operations and Maintenance

Reason: This proposal seeks to incorporate the ANSI/PHTA/ICC-2 Standard for Public Pool and Spa Operations and Maintenance into the International Property Maintenance Code to ensure maintenance and operations requirements and guidance exist for public pools and spas. The PHTA-2 is intended to cover public/commercial aquatic venues operation and maintenance, as a resource for jurisdictions seeking guidance on this topic. This Standard can then be used by state and local authorities as a health and safety document for the operation and maintenance of all types of public aquatic venues. Industry partners such as commercial pool and spa service companies, water park operators and public pool operators will then be required to use this Standard as the benchmark for the minimum standards to operate and maintain public aquatic venues. In many states building and health officials regulate public pools and spas together. By adding this Standard into the IPMC, we are following the intent of this Code “to ensure public health, safety and welfare insofar as they are affected by continued occupancy and maintenance of structures and premises” are followed. Further, as public health officials adopt this Standard by reference in their rule or ordinance, this ensures harmonization with what building departments have adopted, if they adopt the IPMC in their jurisdiction. This Standard coordinates with the design and construction requirements of the International Swimming Pool and Spa Code, creating harmonization among the I-Codes.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Staff Analysis: A review of the standard proposed for inclusion in the code, PHTAANSI/PHTA/ICC-2 2021 Standard for Public Pool and Spa Operations and Maintenance, with regard to some of the key ICC criteria for referenced standards (Section 3.6 of CPI#28) will be posted on the ICC website on or before March 20, 2021.

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee disapproved this proposal as the proposed standard was not yet completed and therefore may technically change. Further, the committee felt the proposed standard was not appropriate for the IPMC because property maintenance inspectors typically do not inspect pools as this is normally done by the health inspector. (Vote: 11-0)

Individual Consideration Agenda
Public Comment 1:

IPMC: APPENDIX C (New), C101 (New), C101.1 (New), C101.2 (New)

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jen@jhatfieldandassociates.com) requests As Modified by Public Comment

Replace as follows:

2021 International Property Maintenance Code

APPENDIX C

SWimming pool Maintenance and operations

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

C101

Swimming Pool Operation and Maintenance

C101.1 General.
The operations and maintenance of public swimming pools and spas shall comply with PHTA 2.


Commenter's Reason: This public comment addresses a concern from the Code Committee that this Standard was not appropriate for the body of the Code but by placing it in the appendix, it will be available as a resource for health or building officials. This public comment would add the ANSI/PHTA/ICC-2 Standard for Public Pool and Spa Operations and Maintenance, which is intended to cover public/commercial aquatic venues operation and maintenance, as a resource for jurisdictions seeking guidance on this topic. This Standard can then be used by state and local authorities as a health and safety guidance document for the operation and maintenance of all types of public aquatic venues. Industry partners such as commercial pool and spa service companies, water park operators and public pool operators can also use this Standard as the benchmark for the minimum standards to operate and maintain public aquatic venues. Further, public health officials can adopt this Standard through adoption of the IPMC by specifically referencing the appendix when adopting the Code by rule or ordinance. In many states building and health officials regulate public pools and spas together, by adding this Standard into the IPMC, we are providing one document that covers design, construction, operation and maintenance. This will make it easier for the building and health officials by having all requirements in one place.

It is also important to note that by putting this Standard in the IPMC appendix, rather than the body of the code, that action will be consistent with what the International Swimming Pool and Spa Code Committee recommended. The ISPSC committee voted to put this new PHTA-2 Standard in the appendix of the ISPSC to provide it as a resource, as we are now suggesting be done in the IPMC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Staff Analysis: In accordance with Section 3.6.3.1 of ICC Council Policy 28, the new referenced standard, ANSI/PHTA/ICC-2 2021, Standard for Public Pool and Spa Operations and Maintenance, must be completed and readily available prior to the Public Comment Hearing in order for this public comment to be considered.

Public Comment# 2852
Proposed Change as Submitted

Proponents: Kevin Stewart, American Lung Association, representing American Lung Association; Jane Malone, American Association of Radon Scientists and Technologists, representing American Association of Radon Scientists and Technologists; Thomas Bowles, representing EPA (bowles.thomas@epa.gov); Ruth Mcburney, representing CRCPD (rmcburney@crcpd.org); Jonathan Wilson, National Center for Healthy Housing, representing National Center for Healthy Housing (jwilson@nchh.org); Tobie Bernstein, representing Environmental Law Institute (bernstein@eli.org); David Kapturowski, representing Spruce Environmental Technologies, Inc. (dave@spruce.com)

2021 International Property Maintenance Code

CHAPTER 4
LIGHT, VENTILATION AND OCCUPANCY LIMITATIONS

SECTION 403
VENTILATION

Add new text as follows:

403.6 Radon.
Radon levels in multifamily buildings shall be tested in accordance with ANSI-AARST MAMF. Radon levels exceeding four pCi/L in multifamily buildings shall be mitigated in accordance with ANSI-AARST RMS-MF.

Add new standard(s) as follows:

AARST

ANSI/AARST MAMF-2017
Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings

ANSI/AARST RMS-MF-2018
Radon Mitigation Standards for Multifamily Buildings

Reason: The purpose of this proposed requirement is to protect families from exposure to radon gas in multifamily buildings. A requirement for radon testing and mitigation will protect occupants who have no authority, capacity, or other means to address excessive radon levels in their homes. Radon is present in indoor air everywhere, regardless of building type or radon zone. Radon-induced lung cancer takes 21,000 lives in the US each year.

The awareness of the need to address radon in multifamily buildings is increasing. HUD’s multifamily loan program (which finances both market-rate and subsidized properties) requires radon testing and mitigation in all multifamily properties according to the measurement and mitigation consensus standards.[1] Several states (Illinois, Minnesota, New Jersey, Oregon, Washington) require soil gas control in the construction of multifamily buildings. Since 2017, the International Green Construction Code, in conjunction with the related standard ASHRAE 189.1, has required soil gas control in new green buildings.

The standards included in this proposal have been vetted and approved by EPA, multiple regulatory states and by HUD (as mentioned above). They can be viewed for free at https://standards.aarst.org

More Background on Radon:

Epidemiological studies confirm that radon increases the risk of lung cancer in the general population. Radon is the second leading cause of lung cancer – second only to smoking – and more significant than secondhand smoke. In the US alone, 21,000 lung cancer deaths each year are caused by radon exposure. 3 The World Health Organization estimates that between 3% and 14% of all lung cancer cases worldwide are caused by radon exposure. 4 The Surgeon General of the United States issued a Health Advisory in 2005 warning Americans about the health risk from exposure to radon in indoor air. Dr. Richard Carmona, the Nation’s Chief Physician, urged Americans find out how much radon they might be breathing. Dr. Carmona also stressed the need to remedy the problem as soon as possible when the radon level is 4 pCi/L or more.

Radon is a colorless and odorless gas that is a decay product of uranium and occurs naturally in soil and rock. The main source of high-level radon pollution in buildings is surrounding uranium-containing soil such as granite, shale, phosphate and pitchblende. Radon enters a building through cracks in walls, basement floors, foundations and other openings. There is no known threshold concentration below which radon exposure presents...
no risk. Even low concentrations of radon can result in a small increase in the risk of lung cancer.


**Cost Impact:** The code change proposal will increase the cost of construction
The proposal will increase the cost of property maintenance. Testing will cost $50-80 per unit. Mitigation, if needed, will cost $1,500-$4,000 per unit. Costs can vary depending on structural and market factors.

**Staff Analysis:** A review of the standards proposed for inclusion in the code, ANSI/AARST MAMF-2017 Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings and ANSI/AARST RMS-MF-2018 Radon Mitigation Standards for Multifamily Buildings, with regard to some of the key ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before March 20, 2021.

**Public Hearing Results**

**Committee Action:** Disapproved

**Committee Reason:** The committee felt that the requirements were too far reaching by including Zone 3, which is noted for very low levels of radon. Further, the committee felt the requirements should also address allowances for historical structures and may be better placed in an appendix to allow for individual jurisdictions to adopt in applicable to their specific locations. (Vote: 10-1)

**Individual Consideration Agenda**

**Public Comment 1:**

**IPMC: 403.6 (New)**

**Proponents:** Jane Malone, representing American Association of Radon Scientists and Technologists; Jonathan Wilson, representing National Center for Healthy Housing (jwilson@nchh.org); Kevin Stewart, representing American Lung Association (kevin.stewart@lung.org); David Kapturowski, representing Spruce Environmental Technologies, Inc.; Thomas Bowles, representing Indoor Environments Division (bowles.thomas@epa.gov); Warren Friedman, representing Office of Lead Hazard Control and Healthy Homes (warren.friedman@hud.gov); Ruth McBurney, representing CRCPD (rmcburney@crcpd.org) requests As Modified by Public Comment

Replace as follows:

**2021 International Property Maintenance Code**

403.6 Radon. Radon present at levels at or above the EPA action level of 4 picocuries radon per liter of air (pCi/L) in the lowest habitable level of the dwelling shall be deemed hazardous. Radon levels shall be determined by an approved testing method. Radon levels equal to or exceeding 4 pCi/L or more shall be reduced by an approved mitigation method. A written radon test report with results less than 4 pCi/L shall be provided to the code official.

**Commenter’s Reason:** This comment presents language adapted from the National Healthy Housing Standard plus a requirement to deliver a compliant test report to the code official consistent with IRC Appendix F. Radon, which causes lung cancer, has been found in buildings in all areas.


**Cost Impact:** The net effect of the public comment and code change proposal will increase the cost of construction
If radon is found, mitigation will cost $2500-4000 per ground-contact unit.
Proposed Change as Submitted

PropONENTS: Gerard Hathaway, representing New York State Department of State (Gerard.Hathaway@dos.ny.gov); China Clarke, representing New York State Dept of State (china.clarke@dos.ny.gov)

2021 International Property Maintenance Code

Revise as follows:

404.4 Bedroom and living room. Every habitable room and bedroom and living room shall comply with the requirements of Sections 404.4.1 through 404.4.5.

404.4.1 Room area. Every habitable room living room shall contain not less than 120 square feet (11.2 m²) and every bedroom shall contain not less than 70 square feet (6.5 m²) and every bedroom occupied by more than one person shall contain not less than 50 square feet (4.6 m²) of floor area for each occupant thereof.

404.5 Overcrowding. Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.

Revise as follows:
### TABLE 404.5 MINIMUM AREA REQUIREMENTS

<table>
<thead>
<tr>
<th>SPACE</th>
<th>1-2 occupants</th>
<th>3-5 occupants</th>
<th>6 or more occupants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living room&lt;sup&gt;a, b&lt;/sup&gt;</td>
<td>420</td>
<td>120</td>
<td>150</td>
</tr>
<tr>
<td>Dining room&lt;sup&gt;a, b&lt;/sup&gt;</td>
<td>No requirement</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Bedrooms</td>
<td>Shall comply with Section 404.4.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For SI: 1 square foot = 0.0929 m².

a. See Section 404.5.2 for combined living room/dining room spaces.

b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

**Reason:** The purpose of this code change is to coordinate the minimum room area requirements found in the International Property Maintenance Code (IPMC) with those found in the International Residential Code (IRC) and the International Building Code (IBC). We have received technical support questions on this subject in New York State, and nationally it has been discussed in industry related forums online.

IPMC 404.4.1 requires that every living room contain not less than 120 square feet (11.2 m²) and every bedroom contain not less than 70 square feet (6.5 m²). The IRC has similar language which is somewhat compatible with the IPMC, requiring that every dwelling unit shall have not less than one room (not specifically a living room) that shall have not less than 120 square feet (11.2 m²) of net floor area, and that other habitable rooms (not only but including bedrooms) shall have a net floor area of not less than 70 square feet (6.5 m²). However, IRC R304.1 simply requires that habitable rooms (including living rooms, bedrooms, etc.) shall have a floor area of not less than 70 square feet (6.5 m²).

Possible scenario: A dwelling unit could be constructed under the IRC or IBC with a 70 square foot living room as allowed by both the IRC and IBC, receive a Certificate of Occupancy, and they would not be in compliance with the 2018 IPMC, which requires a minimum 120 square foot living room. Section 404.5 Overcrowding and Table 404.5 Minimum Area Requirements are retroactive for property maintenance purposes and apply to dwelling units built under the IRC and IBC for municipalities who have adopted the IRC, IBC and IPMC. This could be a problem because municipalities often have local requirements to re-inspect properties when they change hands to confirm that the conditions of the C of O are still in place or as a regular inspection schedule. That inspection would turn up the non-compliance, even though the 70 square foot living room was originally built to code.

The proposed changes to IPMC 404.4 and 404.4.1 are meant to use language (the term "habitable rooms") which is compatible with both the IRC and IBC for consistency. Also, to allow small dwellings to have the minimum 70 square foot living rooms as intended by both the IRC and IBC.

This code change proposal also includes a change in IPMC 404.5 Overcrowding, specifically Table 404.5 Minimum Area Requirements. The "Living Room"/"1-2 occupants" cell of the table has been changed to delete the minimum 120 square foot requirement and allow a minimum 70 square foot Living Room for 1-2 occupants in small dwellings constructed under either the IRC or IBC.

This change continues the effort to allow smaller dwellings built under the IRC and IBC to be compatible with the IPMC once they are completed. Previous cycle code change proposal RB106-13 (R304.1, R304.2), approved for the 2015 IRC, removed the requirement that every dwelling unit have at least one room not less than 120 square feet from the IRC. One of the prime reasons given for that code change proposal was to allow small dwellings to be built under the IRC.

Some people believe that a 70 square foot living room for up to 2 occupants is too small when compared to the efficiency unit requirements that require a minimum of 120 square feet for a maximum of one occupant.

Under IBC Section 1207.4 “Efficiency dwelling units” it is stated that; “An efficiency living unit shall conform to the code except as modified herein.” The section allows smaller units if specific provisions are followed. The IPMC has a corresponding Section 404.6 with occupancy limitations that apply only to Efficiency Units constructed under the IBC and does not apply to dwelling units constructed under the IRC.

The IPMC Efficiency Unit minimum floor area of 120SF is because it is allowed to be the only room except for the required separate closet and bathroom for one occupant and increasing by 100SF per additional occupant up to a total of three.

The IRC allows a minimum floor area of 70SF per habitable room (but, must still follow the requirements of the IPMC). A dwelling unit constructed under the IRC to minimum area requirements would have floor areas that add-up as follows: Living Room 70SF, plus Bedroom 70SF for one occupant (as a combined 140SF space this is already more than the 120SF minimum required for an Efficiency Unit in the IBC), plus bathroom, closets and any other non-habitable spaces. If there were two occupants that would add another 70SF if in separate bedrooms (one 100SF bedroom required if they shared).

Again, this proposed change allows Tiny Houses in the IRC and does not affect the requirements of the IBC and is meant simply to coordinate provisions of the IRC with the occupancy limitations of the IPMC.
New York State has already made this change as of May 12, 2020.

Cost Impact: The code change proposal will decrease the cost of construction
Allowing small homes to be built, without forcing them to provide a 120 square foot living room, will decrease cost.

Public Hearing Results

Committee Action: As Submitted

Committee Reason: The committee agreed that this proposal coordinates the minimum room area requirements found in the International Property Maintenance Code (IPMC) with those found in the International Residential Code (IRC) and the International Building Code (IBC). (Vote: 9-2)

Individual Consideration Agenda

Public Comment 1:
IPMC: 404.4

Proponents: Jonathan Siu, representing Self requests As Modified by Public Comment

Modify as follows:

2021 International Property Maintenance Code

404.4 Habitable room and bedroom requirements. Every habitable room and bedroom shall comply with the requirements of Sections 404.4.1 through 404.4.5.

Commenter's Reason: This public comment is editorial in nature, and is being submitted to complete the correlation with the IRC and IBC as stated in the IPMC Committee reason statement.

By definition in all three codes, habitable rooms (spaces) include bedrooms ("[A]space in a building for living, sleeping, eating or cooking." [emphasis mine]) As approved by the Committee, the code change proposal makes a distinction between habitable rooms and bedrooms by listing them separately. This is unnecessary and potentially confusing.

This public comment removes the distinction by deleting "and bedrooms" in the title and in the text, leaving "habitable rooms" as the scoping/charging language for the section. This change will not affect the application of the following subsections, nor the intent of the code change.

Cost Impact: The net effect of the public comment and code change proposal will decrease the cost of construction

The cost impact statement for the original code change proposal says proposal will result in a decrease in the cost of construction. This public comment is an editorial change that does not change the cost impact of the original proposal.
Proposed Change as Submitted

Proponents: Steven Rosenstock, Edison Electric Institute, representing Edison Electric Institute (srosenstock@eei.org)

2021 International Property Maintenance Code

Revise as follows:

602.2 Residential occupancies. Dwellings shall be provided with heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature for the locality indicated in Appendix D of the International Plumbing Code. Cooking appliances shall not be used, nor shall portable unvented fuel-burning space heaters be used, as a means to provide required heating. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

   Exception: In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms. Cooking appliances shall not be used, nor shall portable unvented fuel-burning space heaters be used, as a means to provide required heating. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

   Exceptions:

   1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the International Plumbing Code.

   2. In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

Reason: This proposal modifies Sections 602.2 and 602.3 to make the language more enforceable and to put restrictions in the appropriate sections.

As currently written, section 602.2 is not enforceable for existing properties. It would require code officials to try to track the sale and use of portable space heaters in residential and commercial buildings (where the occupants own the building and own all of the heating equipment) on a continuous basis. If found, then a code official would have to confiscate such units, which are available in hardware stores and on-line, and could be replaced in a day.

In existing buildings, as currently written, 602.2 would prevent the use of such systems during periods of building renovations when central heating systems are taken off-line.

In existing buildings, it would prevent their use in times of emergencies (e.g., a central heating system shut down and could not be repaired or replaced for a significant amount of time, possibly allowing unsafe thermal conditions).

In existing buildings, portable electric space heaters do not create any emissions or indoor air quality issues.

Portable electric space heaters are safe to use in existing buildings and are required to meet safety standards, such as UL 1278.

The International Fire Code (IFC) allows the use of listed portable electric space heaters. Therefore, as currently written, 602.2 would conflict with the IFC. This code change will remove that conflict.

According to the US Energy Information Administration, Nationwide, 37% of U.S. households supplement their main equipment with a secondary source of heat. Almost half of these households use portable electric heaters, the most common secondary heating choice in every climate region. (emphasis added) (see https://www.eia.gov/todayinenergy/detail.php?id=30672 for more information).

By moving the language from 602.2 to 602.3, the code will be more usable, more enforceable, and will ensure that the problems noted with landlords will still be solved by having the language in Section 602.3.

Bibliography: US Energy Information Administration, Today in Energy, "US households' heating equipment choices are diverse and vary by climate..."
Cost Impact: The code change proposal will not increase or decrease the cost of construction
Portable space heaters are appliances that are purchased by homeowners or building owners at hardware stores or at on-line web sites after a building has been built.

Public Hearing Results

Committee Action: Disapproved
Committee Reason: The committee felt that unvented fuel-burning space heaters could be used for supplemental heat as long as the installed heating equipment provided was capable of providing the minimum heat required. Further, they disagreed with the proponents reason statement regarding the need for code officials to track the sale and use of portable space heaters in residential and commercial buildings. (Vote: 10-1)

Individual Consideration Agenda

Public Comment 1:
IPMC: 602.2, 602.3
Proponents: Steven Rosenstock, representing Edison Electric Institute (srosenstock@eei.org) requests As Modified by Public Comment
Modify as follows:

2021 International Property Maintenance Code

602.2 Residential occupancies. Dwellings shall be provided with heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature for the locality indicated in Appendix D of the International Plumbing Code. Cooking appliances shall not be used, nor shall portable unvented fuel-burning space heaters be used, as a means to provide required heating. The use of portable electric space heaters shall be allowed on a temporary basis when the primary heating facilities are not able to provide heating.

   Exception: In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms. Cooking appliances shall not be used, nor shall portable unvented fuel-burning space heaters be used, as a means to provide required heating. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

   Exceptions:

   1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the International Plumbing Code.

   2. In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

Commenter's Reason: This edit addresses concerns raised by the committee during the committee action hearings. The new language allows people who own and live in the affected dwelling units to use portable electric space heaters when the primary or central heating system is not working and not providing heat.
The language in 602.3 on cooking equipment and unvented space heaters in rental units is consistent with the current language in 602.2.
It should be noted that no one spoke against this proposal during the committee action hearings.
Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposed edit will not change the cost of construction, since portable space heaters are purchased by homeowners after occupancy.