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BOARD OF BUILDING REGULATIONS AND STANDARDS

NOTICE OF MEETING

In accordance with the provisions of G.L. c. 30A § 20, notice is hereby given that the Board of Building Regulations and Standards (BBRS) will convene a regular monthly meeting on:

June 5, 2018 @ 1:00 p.m. until approximately 4 p.m.

50 Maple Street in Milford

Milford is a secure facility. Please allow time to be checked-in at the front desk.

Posted on May 30, 2018 @ 4 p.m.

It is anticipated that the topics shown below will be discussed at the aforementioned meeting:

AGENDA

Roll Call, by BBRS Chair:

John Couture, Chair	<input type="checkbox"/> present	<input type="checkbox"/> absent	Robert Anderson, or designee	<input type="checkbox"/> present	<input type="checkbox"/> absent
Kerry Dietz, Vice Chair	<input type="checkbox"/> present	<input type="checkbox"/> absent	Peter Ostroskey, or designee	<input type="checkbox"/> present	<input type="checkbox"/> absent
Richard Crowley, Second Vice Chair	<input type="checkbox"/> present	<input type="checkbox"/> absent	Michael McDowell	<input type="checkbox"/> present	<input type="checkbox"/> absent
Steve Frederickson	<input type="checkbox"/> present	<input type="checkbox"/> absent	Susan Gleason	<input type="checkbox"/> present	<input type="checkbox"/> absent
Kevin Gallagher	<input type="checkbox"/> present	<input type="checkbox"/> absent	Lisa Davey	<input type="checkbox"/> present	<input type="checkbox"/> absent
Cheryl Lavalley	<input type="checkbox"/> present	<input type="checkbox"/> absent			

Regular Meeting

- Review\Vote** approval of April 10, 2018 BBRS draft meeting minutes.
- Review\Vote** approval of April 4, 2018 BOCC draft meeting minutes.
- Review\Vote** actions relating to code change proposals submitted for the May public hearing.
 - Proposal Number 5-1-2018** – Consider adopting 2018 International Energy Conservation Code (IECC) & Discuss Stretch Energy Code Provisions.
Link to code: <https://codes.iccsafe.org/public/document/iecc2018>
 - Proposal Number 5-2-2018** – Consider adopting Appendix Q of the International Residential Code pertaining to Tiny Houses.
Link to appendix: <https://codes.iccsafe.org/public/document/IRC2018/appendix-q-tiny-houses>
 - Proposal Number 5-3-2018** – Consider adopting an amendment particular to Micro Units.
See attached proposal from Mike DiMascio.
 - Proposal Number 5-4-2018** – Consider adopting 2015 International Solar Energy Provisions.
Link to document: <https://codes.iccsafe.org/public/document/ISEP2015>



- **Proposal Number 5-5-2018** – Consider updating NFPA 241 to the 2013 Edition to coincide with 527 CMR (The Massachusetts Comprehensive Fire Safety Code) and broaden the scope beyond standpipes (*see below*).

NFPA 241 – 2009 *Standard for Safeguarding Construction, Alteration, and Demolition Operations*

905.10 Revise section as follows:

905.10 During Construction. Standpipes systems required during construction and demolition operations shall be provided in accordance with section 3311 and NFPA 241.

- **Proposal Number 5-6-2018** – Consider broadening the scope of NFPA 130 beyond Chapters 2, 3, 4, and 5 (*see below*).

101.4.13 Transit and Commuter Rail Stations. Such stations shall comply with 780 CMR and Chapters 2, 3, 4, and 5 of NFPA 130-2014. Any references to NFPA 101 and NFPA 220 shall mean reference to 780 CMR. Where conflict exists between 780

- **Proposal Number 5-7-2018** – Consider developing a swimming pool installers license\certification based on the Association of Pool & Spa Professionals (APSP) standards.
Link to standards: <http://apsp.org/pool-and-hot-tub-certification>
- **Proposal Number 5-8-2018** – Consider adding the following paragraph as Section 105.3.1.1 for both the base and comparable residential code section (*see below*).

If a permit applicant fails to complete the permitted work by correcting outstanding code violations or fails to notify the inspector as required for final inspection, at the discretion of the authority having jurisdiction, the applicant may not be granted any further permits until the outstanding code issues are satisfactorily addressed.

105.3.1 Action on Application. The building official shall examine or cause to be examined applications for permits and amendments, and shall issue or deny the permit, within 30 days of filing. If the application or the construction documents do not conform to the requirements of 780 CMR and all pertinent laws under the building official's jurisdiction, the building official shall deny such application in writing, stating the reasons therefore. The building official's signature shall be attached to every permit. The following requirements, where applicable, shall be satisfied before a building permit is issued:

- **Proposal Number 5-9-2018** – Consider, via emergency action, revising Section 2603.5.5 to coordinate with final amendments made to Sections 1403.5 and 1407.10.4 of the ninth edition code.

2603.5.5 Revise subsection as follows:

2603.5.5 Vertical and Lateral Fire Propagation.

The exterior wall assembly shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

EXCEPTIONS:

1. Wall assemblies where the foam plastic insulation is covered on each face by not less than one-inch (25 mm) thickness of masonry, concrete, terracotta, stucco or ½-inch-thick Type X gypsum board and meeting one of the following:
 - 2.1 There is no airspace between the insulation and the masonry, concrete, terracotta, stucco, or ½-inch thick type X gypsum board.
 - 2.2 The insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E 84 or UL 723 and the maximum airspace between the insulation and the concrete or masonry is not more than 1 inch (25 mm).
2. In other than high rise buildings, walls in buildings equipped throughout with an automatic sprinkler system, with the following conditions: 1) only where a NFPA 13 sprinkler system is provided and 2) where fire flow analysis has been performed without sprinkler decrease allowance that shows adequate water is available.

- **Proposal Number 5-10-2018** – Consider amending Section R303.1, exception number 1. See attached proposal from Frank Ramsbottom.
- **Proposal Number 5-11-2018** – Consider adding item number 9 to Section R105.3 concerning information requested on a building permit application.

9. If applicable, in accordance with MGL 149 Section 6 and 454 CMR 22.00, include the *Lead-Safe Renovation Contracting Licensees'* name and license number.

5. State the valuation of the proposed work. The building official has authority to request from the applicant a detailed substantiation of the valuation.
6. Be signed by the owner or authorized agent.
7. Give such other data and information as required by the building official in accordance with 780 CMR.
8. If applicable, include the registration number and information of home improvement contractors or subcontractors for residential contracting services, in accordance with M.G.L. c. 142A, §§ 9(a) and 13.

- **Proposal Number 5-12-2018** – Consider amending Section N1103.6.2 and R403 to add reference to licensed sheet metal workers. See attached proposal from Cathy Flaherty.
- **Proposal Number 5-13-2018** – Consider amending Section N1103.3.3 and R403.3.3 to add reference to licensed sheet metal workers. See attached proposal from Cathy Flaherty.
- **Proposal Number 5-14-2018** – Consider amending Section 101.5 of the base code and comparable section of the residential code by deleting the last sentence as well as the name and make-up of each committee.

101.5 BBRS Advisory Committees. BBRS technical advisory committees support requests from and by the BBRS as it deems necessary in accordance with M.G.L. c. 143. Titles and membership of these technical advisory committees may be viewed at <http://www.mass.gov/ocabr/government/oca-agencies/dpl-lp/opsi/>. These technical advisory committees include, but are not limited to the following committees with their respective composition listed:

Energy Advisory Committee (“EAC”)

One Division of Professional Licensure staff
One Department of Energy Resources staff
One mechanical engineer (with HVAC expertise)
One architect
One utility company designee
One building envelope expert
One lighting controls expert
One building official
One IAQ / filtration expert
One high performance housing expert
One ASHRAE 62.1, 62.2, and 90.1 expert

Fire Protection Fire Prevention Committee (“FPFP”)

One Division of Professional Licensure staff
One Department of Fire Services staff
Boston Fire Department Commissioner, or designee
Two fire protection engineers
One fire chief representative
One building official representative
One architect representative
One residential contractor representative (for topics related to the residential volume)
One general contractor representative (for topics related to the base volume)
One sprinkler contractor
One fire alarm contractor

- **Proposal Number 5-15-2018** - Consider deleting Section AU103.7 and RB103.7 of the IECC (*submitted during hearing*).

Existing language:

AU103.7 (RB103.7) Electrical Service Reserved Space. The main electrical service panel shall have a reserved space to allow installation of a dual pole circuit breaker for future solar electric installation and shall be labeled “For Future Solar Electric.” The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

Proposed changes:

Delete entire section AU103.7 (RB103.7)

4. **Discuss** general direction for next edition of 780 CMR.
5. **Review\Vote** FAQ responses for:
 - a.) Wind-borne debris.
 - b.) Underfloor protection.
 - c.) Additions in floodplains.
 - d.) Substantial structural alterations.

6. **Review\Vote** certain requests pertaining to:
 - a.) *Life experience* for active construction professionals in lieu of completing the 12 CEU requirement.
 - b.) *Continuing Education Waiver* to complete the classroom requirement for people on active Military Duty or for medical reasons.
7. **Consider\Vote** approval of new CSLs issued in the month of April, 2018.
8. **Discuss\Vote** CSL Average Passing Score\Medical\Military\Age or Continuing Education Requirements.
 - a.) Frank Baj CS-011406 (*Medical*)
 - b.) Romero Wilson CS-087861 (*Medical*)
9. **Discuss** other matters not reasonably anticipated 2 business days in advance of meeting.



The Commonwealth of Massachusetts

Office of Public Safety & Inspections
Board of Building Regulations and Standards
One Ashburton Place - Room 1301
Boston, MA 02108

780 CMR - MASSACHUSETTS BUILDING CODE - AMENDMENT PROPOSAL FORM

Impacted code:	9 th Edition Base Code	State Use Only	
Date Submitted:	April 30, 2018	Date Received:	
Code Section:	New	Code Change Number:	
Name of proponent:	Mike DiMascio		
Company / Organization represented, if any:			
Address (number, street, city, state, ZIP):	18 Hayden Rowe St., Hopkinton, MA 01748		
Telephone number:	617-447-1854		
Email address:	Mike.dimascio@arup.com		

PLEASE CHECK OFF THE TYPE OF AMENDMENT PROPOSED

Change existing section language **Add new section** Delete existing section and substitute
Delete existing section, no substitute **Other, Explain:**

PLEASE TYPE THE PROPOSED AMENDMENT BELOW. If you propose to change a section, please copy the original text from either the relevant model code and/or MA amendment. Indicate, with a strikethrough, the text that you propose to delete. Please also indicate any new text in both *italic* and **red** font. Finally, for each proposal submitted, please provide the justification items requested below. Completed code amendment forms may be emailed to Cesar Lastra @ Cesar.Lastra@state.ma.us. Please attach additional pages as necessary.

Existing language: None

Proposed Changes: See attached.

Background and rationale: The availability of housing for people new to the market in areas such as Boston and the immediate suburbs is such that affordability is a major problem for those concerned. Recent experience with new apartment buildings with a mix of studios, one-bedroom and two-bedroom units shows that the difference in rent between a studio and one-bedroom unit is only a few hundred dollars. The rents are in the range of \$2,300 to \$2,500 for studio apartments. This is out of the reach of many if not most single people who have recently graduated and starting work in Boston or moved to Boston from a more affordable location.

Pros of the proposed change: The cost to rent units is driven by the cost to build the units in a very active real estate market. The costs to build the units is directly related to the size of the units which is driven by the requirements in the

Massachusetts State Building Code. Research into the origin of the area requirements shows no particular reason for the minimum areas and in fact seems to indicate the choice of minimum areas was somewhat arbitrary.

The City of Boston is looking to modify its zoning regulations to allow these types of units. Other jurisdictions have recognized this issue and have allowed for smaller units to address affordability. Seattle has allowed so-called micro-units for several years (see attached), New York City made changes to the allowable minimum areas found in the International Building Code to allow for smaller units.

Other jurisdictions are either allowing the smaller units via the appeals process or zoning codes. The issue with this approach is that developers are reticent to invest the money to pursue this route without knowing the outcome. If the reduced size is allowed by the building code, developers are more willing to invest money upfront to build these more affordable units.

The proposed appendix section allows for an alternative to the current minimum areas with features that compensate for the reduced size of the unit. The proposed appendix wording requires more natural light be provided within the unit and that common spaces for gathering and storage be provided based on the number of units within the building.

Some spaces within the units cannot be reduced due to other restrictions such as those associated with the Massachusetts Architectural Access Board regulations and the Fair Housing Act. These regulations affect the size of the bathrooms and spaces in the kitchens by requiring minimum size spaces for access to fixtures and appliances. Other aspects such as minimum room widths and heights are not changed.

Pros of the proposed change: The following are the pros associated with the reduced dimensions allowed by the proposed code change.

- Smaller more affordable units
- Gathering spaces for more interaction among the residents
- No cost to the development community if the option is not selected

Cons of the proposed change: The following are the cons associated with the reduced dimensions allowed by the proposed code change.

- None identified

Estimated impact on life safety: None, no reduction in life safety is allowed as part of the proposed code change

Estimated impact on cost: Reduced cost of development due to the greater density of units allowed

MICRO UNITS

GENERAL

Scope – This appendix shall be applicable to micro units uses as dwelling units within apartment or condominium buildings. Micro units shall comply with this code except as otherwise stated in this appendix.

DEFINITIONS

General – The following words and terms shall, for the purpose of this appendix, have the following meaning shown herein. Refer to Chapter 2 of this code for general definitions.

Micro Unit – A dwelling unit that is 200 square feet or more in floor area within the inside surface of the enclosing walls.

MINIMUM AREAS

Minimum Habitable Room Areas - Every micro unit shall have no fewer than one room that shall have not less than 120 square feet of net floor area, exclusive of structural elements, bathrooms, built-in cabinets, appliances and closets, for one person. Each additional person shall require an additional 30 square feet. The required 120 square feet of net floor area of contiguous space shall be on one floor level. Other habitable rooms in the same unit shall have a net floor area of not less than 70 square feet.

PRIVACY

Privacy - Each bathroom shall occupy space with permanent or movable partitions enclosing the fixtures to ensure privacy.

LIGHT AND VENTILATION

Light/Ventilation - All habitable spaces shall have sufficient access to daylight. Units shall provide a minimum ceiling height of 8 feet, and minimum window glazing area of at least 15% of habitable room area. Twenty-five percent of the window area shall be openable.

COMMON SPACE

Common Space - For buildings with 30 or fewer micro units, a minimum of 600 square feet of common space shall be provided. For buildings with more than 30 micro units, 10 square feet of common space shall be provided for each additional unit. Common space shall be located along common paths of travel and with good access to natural light and ventilation.

STORAGE

Unit Storage – A built-in storage space, exclusive of kitchen cabinets, shall be provided within each unit.

Common Space Storage - Individual unit lockable storage space within common areas shall be provided. A minimum of 20 square feet of storage space shall be provided for each unit. Individual bicycle storage space may count toward the minimum.

Applicant: City of Seattle Department of Construction and Inspections	Page 1 of 3	Supersedes: 7-2016
	Publication: 5/04/2017	Effective: 6/30/2017
Subject: Small Efficiency Dwelling Units	Code and Section Reference: Seattle Building Code	
	Type of Rule: Code Interpretation	
	Ordinance Authority: SMC 3.06.040	
Index: Seattle Building Code	Approved (signature on file) Nathan Torgelson, Director, Seattle DCI	Date 6/28/2017

BACKGROUND:

This Rule sets forth minimum room size and other technical requirements for small efficiency dwelling units.

Seattle Building Code (SBC) Section 1208 outlines minimum interior space dimensions for room widths (1208.1), ceiling heights (1208.2), and room area, (1208.3) for dwelling units, and (1208.4) for efficiency dwelling units. Section 1208.4 also requires units be provided a separate closet and bathroom, kitchen area with a kitchen sink, cooking appliance, and refrigeration facilities.

This Rule allows for efficiency units smaller than required by Section 1208.4, when other specified amenities are provided.

This Rule does not modify the required standards for Type A or Type B dwelling units.

RULE:

Dwelling units shall comply with the SBC Section 1208 for interior dimensions, except when modified by this Rule. Small efficiency dwelling units (SEDU) are single, independent, residential units consisting of one habitable room (excluding kitchen, bath, closets, storage areas, and built-ins).

Dwelling units having a living room floor area 220 square feet or greater, or a total gross unit size exceeding 320 square feet measured to the interior face of unit bounding walls, are not considered small efficiency dwelling units and at a minimum, shall meet the efficiency dwelling unit requirements found in SBC Section 1208.4.

FLOOR AREA:

Habitable Space: A SEDU shall have a living room of at least 120 square feet of net floor area of habitable space meeting dimensions outlined in SBC 1208.1 and 1208.2.

Occupiable Space: A SEDU shall have an additional 30 square feet of net floor area of occupiable space, which is not required to meet the habitable space dimensions of SBC 1208.1, contiguous to the 120-net square foot living room floor area.

The required 150 square feet of net floor area of contiguous habitable/occupiable space shall be on one floor level.

Space occupied by structural features, bathrooms, closets, cabinets, appliances, built-ins, or any encroachments not specified in SBC 1208.1 and 1208.2, shall not be included when calculating the required net floor area.

FOOD PREPARATION AREA:

A food preparation area shall be provided with the following components with each having a clear working space of not less than 30 inches:

- cooking appliance;
- refrigerator;
- sink with hot and cold water;
- food and utensil storage space; and
- contiguous countertop work area of not less than 4 square feet

For the purposes of this Rule only, a microwave oven is permitted to serve as the cooking appliance and shall not encroach on the required countertop work area. The food preparation area shall be provided with two 20 amperes small appliance branch circuits. Each circuit shall serve at least one duplex receptacle. Built-in cooking appliances shall be on an additional circuit.

CLOSETS AND STORAGE:

A built-in closet shall be provided within each unit. The portion of a closet used to store built-in beds or other equipment shall not be counted in the SEDU's required square footage, and it also shall not be counted as a required closet. Additionally, there shall be 55 cubic feet of storage space provided for each unit located anywhere within the building, and several may be grouped together in a common storage area.

NATURAL LIGHT:

Habitable/occupiable space shall be provided with natural light per SBC Section 1205.2.