

CHARLES D. BAKER

KARYN E. POLITO LIEUTENANT GOVERNOR

JAY ASH SECRETARY OF HOUSING AND ECONOMIC DEVELOPMENT

Commonwealth of Massachusetts Division of Professional Licensure Office of Public Safety and Inspections

1000 Washington Street • Boston • Massachusetts • 02118

JOHN C. CHAPMAN
UNDERSECRETARY OF
CONSUMER AFFAIRS AND
BUSINESS REGULATION

CHARLES BORSTEL
COMMISSIONER, DIVISION OF
PROFESSIONAL LICENSURE

Board of Building Regulations and Standards (BBRS)

November 14, 2018 Statutory Public Hearing & Regular Meeting The Boston Society of Architects (BSA) Office 290 Congress Street in Boston

Chairman, John Couture, opened the public hearing portion of the meeting at approximately 10:10 a.m.

Chairman Couture took roll call as follows:

John Couture, Chair	$\sqrt{\text{present } \square \text{ absent}}$	Peter Ostroskey*	$\sqrt{\text{present } \square \text{ absent }}$
Kerry Dietz, Vice Chair	$\sqrt{\text{present } \square \text{ absent}}$	Michael McDowell	$\sqrt{\text{present } \square \text{ absent}}$
Richard Crowley, Second V. Chair	$\sqrt{\text{present } \square \text{ absent}}$	Susan Gleason	$\sqrt{\text{present } \square \text{ absent}}$
Kevin Gallagher	$\sqrt{\text{present } \square \text{ absent}}$	Lisa Davey	$\sqrt{\text{present }}$ absent
Cheryl Lavalley	$\sqrt{\text{present } \square \text{ absent}}$	Steve Frederickson	□ present √absent
Robert Anderson	$\sqrt{\text{present } \square \text{ absent}}$		

General notes on format of these minutes

- These minutes represent general points provided as testimony during the public hearing portion and \or member and audience discussion during the public hearing and regular meeting session. The minutes are not intended to be a verbatim account of discussions.
- *Votes are noted as MOTION by, seconded by, and whether it was a unanimous or split vote.*
- Agenda topics as numbered may be in the same order as they appear on the meeting agenda.
- The meeting agenda is listed as **EXHIBIT A**; others are listed sequentially as addresses during the meeting.

Public Hearing Portion

1. Chairman Couture allowed City of Boston, District 6 Councilor Matt O'Malley, to testify out of order on the merits of the *Stretch Energy Code* as well as the move towards the *2018 International Energy Conservation Code* (IECC).

Councilor O'Malley thanked Chairman Couture and Board members for the opportunity to speak indicating that he and the Mass Climate Action Network are in favor of a robust energy code for the commonwealth that includes electric vehicle charging station requirements, goals for carbon neutrality in building construction by the year 2050 and other initiatives.

Jen Hoyt (JH) participated as the designee for State Fire Marshal, Peter Ostroskey.

Councilor O'Malley applauded Board members for its work with energy conservation over the years and, rather than getting into great detail with his testimony, submitted a letter from the Action Network dated November 14, 2018 (**EXHIBIT B**) to further expound on these issues.

Proposal Number 11-1-2018 - Consider revising Sections R401.2 and R407 (EXHIBIT C).
 Proponent: Kevin Rose, Mass Save

Proponent Kevin Rose, testified that he hopes Board members will act favorably on each proposal offered by *Mass Save* during the proceedings. Specific to this proposal, which intends to balance ventilation energy code requirements, Mr. Rose stressed that that most buildings are constructed with only exhaust fans. The proposed change offer choice with regard to additional energy efficiency packages.

Kerry Dietz noted that Heat Recovery Ventilation (HRV) systems are addressed in the proposal, but not Energy Recovery Ventilation (ERV) systems. Mr. Rose agreed that ERV should be included in the proposal.

Kerry also noted ambitious energy efficiency ratings described in the proposal and asked about first costs of the measure. Rich Crowley noted that his experience is that 90 – 91% efficiency seems to be the best achievable rate, not 95%.

Mr. Rose expressed that first costs are not well known and made note of other comments.

3. **Proposal Number 11-2-2018** – Consider revising Section R402.4 (**EXHIBIT D**). **Proponent:** Kevin Rose, *Mass Save*

Proponent Kevin Rose, testified that proposal attempts to better define insulation installation requirements by addressing allowable gaps in product installation, requiring Grade 1 quality in accordance with ICC/RESNET 301.

Both Kerry Dietz and Chairman Couture noted that a building code enforcement official can site workmanship issues currently, effectively addressing this concern. Chairman Couture was concerned about establishing additional standards for installation.

4. **Proposal Number 11-3-2018** – Consider revising Sections R806.5, and 1203.1.2.3 (**EXHIBIT E**). **Proponent:** Christopher Alphen, *Dolphin Insulation*

Proponent Christopher Alphen indicated that he considered suggestions offered by Board members when he first offered this proposal last year and revised the language to produce a better result. Mr. Alphen specified that the proposal is intended to require air permeable insulation and smart vapor retarder to conform to certain installation requirements and density levels as an alternative.

Mike McDowell asked if the proposal had been presented to the International Code Council (ICC) for consideration. Mr. Alphen indicated that the procedure is not well known across this country, it is used

in Europe, in particular, Germany. It would likely require a bit of education in order to ensure that ICC review committee members or others understood the proposal.

Audience member and Town of Acton building inspector, Tom Moberg, indicated that he denied a building permit application to Mr. Alphen, not because he believed the systems to be inferior, but because he believed that its installation does not comply with the code as currently written. Inspector Moberg indicated that Mr. Alphen does great work and agreed that it would be nice to revise the code to allow for the system's use without having to seek a variance from the Building Code Appeals Board (BCAB).

Several Board members noted that it seems like a good idea but may still need some fine-tuning. It was therefore suggested that Mr. Alphen meet with members of the Board's Energy Advisory Committee (EAC) to further refine proposed code language. Audience member and EAC chair, Ian Finlayson, indicated that EAC members have reviewed the matter to some degree and think it is a good proposal and would be happy to help refine the language to a more acceptable form.

5. **Proposal Number 11-4-2018** – Consider revising Sections C401.2, C403.7 and C403.8 (**EXHIBIT F**). **Proponent:** Brenden Giza-Sisson, *Mass Save*

Proponent, Brenden Giza-Sisson explained that the proposal intends to better address exhaust energy in laboratory environments. Mr. Giza-Sisson indicated that laboratory exhaust is often based on rules of thumb that may not adequately prevent re-entrainment of contaminated air during some events. The proposal aims to reduce lab exhaust energy usage while improving environmental health.

In response to a question from Chairman Couture, Mr. Giza-Sisson indicated that designers are free to use this methodology now, but cannot be compelled to do so because it would exceed code requirements as presently written.

6. **Proposal Number 11-5-2018** – Consider revising Sections C401.2 and C405.2.3 (**EXHIBIT G**). **Proponent:** Brenden Giza-Sisson, *Mass Save*

Proponent, Brenden Giza-Sisson explained that the proposal simply requests to change one number, from 150 to 100 relating to watts for general lighting in certain conditions. The request is based on research and modeling done by Pacific Northwest National Laboratory (PNNL).

7. **Proposal Number 11-6-2018** – Consider revising Sections C401.2, C405.4 and C406.3 (**EXHIBIT H**). **Proponent:** Brenden Giza-Sisson, *Mass Save*

Proponent, Brenden Giza-Sisson explained that the proposal is comprised of 2 basic components. The first is to close a loophole in exterior lighting power design for both ASHRAE and IECC and the second seeks to decrease overall exterior lighting allowances by 10% for certain projects.

Kerry Dietz expressed concern that these are really 2 separate proposals that place a burden on building code enforcement officials.

8. **Proposal Number 11-7-2018** – Consider revising Section C405 (**EXHIBIT I**). **Proponent:** Brenden Giza-Sisson, *Mass Save*

Proponent, Brenden Giza-Sisson explained that the proposal intends to establish measures to reduce plug use that have emerged as a primary energy user in new buildings. There was little discussion on the proposal since its intent was clear.

9. **Proposal Number 11-8-2018** – Consider revising Section C405.3.2 (**EXHIBIT J**) **Proponent:** Brenden Giza-Sisson, *Mass Save*

Proponent, Brenden Giza-Sisson explained that the proposal intends to revise values in the referenced section and corresponding table based on evaluations by *Mass Save* indicating that the efficacy of interior lighting installed in new Massachusetts commercial construction projects is significantly better than lighting power density performance prescribed by 2018 IECC and ASHRAE 90.1-2016. The new values proposed are derived from proposed California Title 24 as well as a 2018 study of Massachusetts construction projects. Mr. Giza-Sisson indicated that these values are also proposed for inclusion in the 2021 IECC.

Kerry Dietz expressed concern with regard to multi-family construction projects. Mr. Giza-Sisson explained that the values only effect common areas in multi-family.

10. **Proposal Number 11-9-2018** – Consider revising Section C405.2.2.1 (**EXHIBIT K**). **Proponent:** Glenn Heinmiller, *International Association of Lighting Designers*

Proponent, Glenn Heinmiller, explained that the proposal intends to clarify the code by replacing confusing phrases and removing redundant language relating to lighting control methods.

11. **Proposal Number 11-10-2018** – Consider revising Section C406.4 (**EXHIBIT L**). **Proponent:** Glenn Heinmiller, *International Association of Lighting Designers*

Proponent, Glenn Heinmiller, explained that the proposal intends to remove individual user control from the referenced section in order to increase usability as an efficiency option.

12. **Proposal Number 11-11-2018** – Consider revising Section C503.1 (**EXHIBIT M**). **Proponent:** Glenn Heinmiller, *International Association of Lighting Designers*

Proponent, Glenn Heinmiller, explained that the proposal intends to clarify which portions of the code for new construction apply to alteration projects as defined by the code.

There was little discussion relating to proposals 11-9, 10 and 11 as there intent seemed clear.

13. **Proposal Number 11-12-2018** – Consider revising Section 305 of the *International Swimming Pool & Spa Code* (ISPSC) - (**EXHIBIT N**)

Proponent: Tom Moberg, Town of Acton

Proponent, Tom Moberg, intends to remove the exception that allows the installation of an automatic pool cover in lieu of fence protection around in-ground pools. Mr. Moberg explained that protection by use of a pool cover is reliant on the operation by an owner each time he\she leaves the area. Fence protection is more reliable.

Audience member, Jennifer Hatfield, expressed that automatic cover protection has been in the code since 2012 and there have not been any reports of drowning's when covers are used as protection.

14. **Proposal Number 11-13-2018** – Consider Sections R313.2, AJ102.3 and add AJ102.3.2 (**EXHIBIT O**). **Proponent:** Fire Prevention\Fire Protection (FPFP) Committee

Rob Anderson explained that this proposal intends to address whether or not automatic sprinkler protection is required when large, existing homes (*greater than 14,400 square feet*) are renovated or added to (*causing the area to exceed 14,400 square feet*). Since 2007, the code has required automatic sprinkler systems in newly constructed single- or two-family homes, but it was not clear what happens under conditions described above. At the request of Board members, the proposal was developed by the FPFP Committee to clarify requirements.

15. **Proposal Number 11-14-2018** – Consider correcting Sections 305.2 and 308.6.1 having to do with day care age requirements (**EXHIBIT P**).

Proponent: OPSI Building Inspectors Gordon Bailey & David Holmes

Rob Anderson explained that this proposal as well as proposal 11-15-2018 intends to correct errors in the code that have been discovered by code users and enforcers. There was no discussion as the intent of each proposal appears to be clear.

16. **Proposal Number 11-15-2018** – Consider correcting Sections AF103.4.2 and 103.4.3 having to do with radon control requirements (**EXHIBIT Q**).

Proponent: Mike Grover, City of Cambridge

17. **Proposal Number 11-16-2018** – Discuss meaning of Section 501.1 Note 3 pertaining to construction requirements for hospitals and nursing homes (**EXHIBIT R**).

Proponent: Mark Hughes, Town of Framingham

Rob Anderson explained that this proposal requires further research and was included only to allow discussion at a future meeting when research has been concluded.

18. On a **MOTION** by Kerry Dietz seconded by Jen Hoyt it was unanimously voted to close the public hearing portion of the meeting @ 12:07 p.m.

Regular Meeting Portion

- 1. **BBRS Minutes.** On a **MOTION** by Kerry Dietz seconded by Cheryl Lavalley it was voted in the majority to approve the minutes for the October 9, 2018 Board of Building and Regulations and Standards (BBRS) meeting as submitted (**EXHIBIT S**). Rich Crowley abstained from the vote since he was not in attendance.
- 2. **BOCC Minutes.** On a **MOTION** by Kerry Dietz seconded by Kevin Gallagher it was unanimously voted to approve the minutes for the September 19, 2018 Building Official Certification Committee (BOCC) meeting as submitted **(EXHIBIT T)**.
- 3. **Discuss Locking Arrangements and Associated Hardware for Protection Against Active Shooters.**On a **MOTION** by Kerry Dietz seconded by Kevin Gallagher it was unanimously voted to approve the FAQ relating to the topic as written for posting on the website and distribution to interested parties **(EXHIBIT U)**.

Jen Hoyt indicated that she hopes to meet with ALICE (Alert, Lockdown, Inform, Counter, and Evacuate) training instructors and others to continue discussions about how best to prevent the ill effects of active shooters and other intruders.

- 4. **Discuss Progress Towards Tenth Edition 780 CMR.** Rob Anderson indicated that all technical advisory committees, with the exception of Geotechnical Advisory Committee (GAC), have begun review of the 2018 I-Codes and related Massachusetts amendments. GAC is scheduled to begin their review during a meeting on November 19th.
- 5. **Discuss Code Change Proposal Number 5-7-2018** Regarding developing a swimming pool installers license\certification based on the *Association of Pool & Spa Professionals* (APSP) standards.

Rob Anderson introduce the topic by reminding Board members that legislation has been filed to require licensing of pool installers and maintenance personnel. Although the legislation has not yet passed, Board members decided it would be wise to explore available licensing and\or certification models currently used in other states and so assigned staff. Resultantly, staff has worked with members of the Association of Pool and Spa Professionals to present options as how best to proceed. Certain options were first presented as part of the referenced code change back in May. Board members asked for further clarity of these options. Accordingly, Jennifer Hatfield, Director of Government Affairs for the Association of Pool & Spa Professionals (APSP), was present at the meeting to explain methods used in other jurisdictions as well as possibilities for Massachusetts.

Ms. Hatfield first reviewed the make-up and organizational structure of the APSP and its goal to create equitable standards for use in all 50 states for licensing and\or certifying pool installers and maintenance personnel. Ms. Hatfield Bill also informed Board members that House Bill (HB) 4359, titled *An Act relative to the licensure of swimming pool builders and service contractors*, was reported favorably by the Consumer Protection Committee and referred to the committee on House Ways and Means then reviewed a *PowerPoint Presentation* (EXHIBIT V) pertaining to available options.

Ms. Hatfield reviewed methodologies that are used in Connecticut and other locations that require rigid classroom and\or on-line training and examination requirements in order to be certified as a pool installer or maintenance person. However, Ms. Hatfield stressed that education and exam can be tailored to suit the needs of the commonwealth if they appear too rigid.

Rich Crowley questioned why the association went to the legislature to establish requirements rather than coming directly to the BBRS? Rich explained that every effort is made to cover all building and\or structure designed and requirements in the pages of the building code as it becomes unwieldy and inflexible when code requirements are established in law.

Ms. Hatfield indicated that she and association members were of the opinion that Board members would need statutory authority to enact licensing requirements.

Rob Anderson explained that Massachusetts General Law (MGL) provides only 2 sentences relating to the Board's licensing authority. The law states that the Board is authorized to issue licenses to individuals engaged as construction supervisors and that fees for such licenses shall be collected and retained by the commonwealth; that's it. Presumably, the pool installer's license will be a form of construction supervisor license, so the law may not need modification, but it may be wise to make it clear in the law that Board members have authority to license pool installers and maintenance personnel. Jen Hoyt echoed the thought that it is prudent to have clear legislative authority when it comes to licensing to avoid challenges.

Following discussion, Chairman Couture indicated that staff should continue to work with the APSP and legal staff to refine proposed requirements.

- 6. Discuss Cannabis, Geotechnical and Fire Prevention\Fire Protection (FPFP) Advisory Committee make-up. Rob Anderson indicated that Board members had agreed to establish the structure of the Cannabis Group to include:
 - Office of Public Safety & Inspections (OPSI) staff;
 - Department of Fire Services (DFS) staff; and
 - Building Official;
 - Cannabis industry; and
 - Farm Bureau representation.

Rob indicated that volunteers from each group, with the exception of the Farm Bureau, have been identified. Rich Crowley indicated that he could track-down a suitable farm bureau representative. Accordingly, chairman Couture deferred appointment to the committee until the next meeting.

Rob Anderson also identified that names have been presented to fill a position on the FPFP Advisory Committee recently vacated by Harold Cutler. Rob indicated that Harold had generously donated his time to FPFP and others code related efforts over the years, but has

decided to step down from service as a fire protection engineer on the committee. Chairman Couture and all Board members wished to extend thanks to Mr. Cutler and best wishes for the future. Chairman Couture deferred appointment of a replacement until next meeting.

Rob Anderson explained that the Geotechnical Advisory Committee (GAC) is comprised almost exclusively of geotech engineers. Jake McManus, a young building contractor, contacted the office expressing interest in getting involved with code development, perhaps as an advisory committee member. Jake intends to attend the GAC meeting on November 19th and, as earlier required by Board members, GAC members will discuss committee make-up to determine if it is well balance and whether or not there should be differing perspectives, including that of the building contractor. Based on the discussion, Jake may seek appointment to the GAC.

6. Discuss Progress of the Manufactured Buildings Study Group. Dan Walsh gave a brief overview efforts indicating that the group continues to focus on program refinements to better educate licensed construction supervisors, code enforcement officials, and certified installers involved in the process; better communicate with Third Party Inspection Agency (TPIA) personnel; better guidance as to how to resolve issues should something go awry with a project.

Dan indicated that group members have a meeting at the conclusion of this meeting to further review these and other issues in hopes of providing completed recommendations for change to Board members in December.

- 7. Discuss approval of 82 new CSLs issued in the month of October, 2018.

 Board members acknowledged approval of 135 new CSLs issued in the month of October, 2018.
- 8. Discuss CSL Average Passing Score\Medical\Military\ Age or Continuing Education Requirements. None this month.
- 9. **Discuss 2019 BBRS Meeting Schedule.** Rob Anderson informed Board that we lost access to the large conference room in Milford for the second Tuesday of each month (*Department of Corrections has claimed the space*). Consequently, we had to search for new dates and or locations to accommodate the meeting schedule for next year. Rob explained that locations have been secured, but not necessarily on the usual meeting day.

AIA Representative, John Nunnari, indicated that the BSA space (*used for this meeting*), may be available for January 8, 2019. Board members agreed that they would like to use the space if available and thanked John and the BSA for the offer and for use of the space for today's meeting.

10. **Discuss** BCAB and full Board Training.

Rob Anderson reminded Board members that they agreed to meet @ 10 a.m. on December 11^{th} in Milford for the referenced training.

11. Discuss other matters not reasonably anticipated 2 business days in advance of meeting.

Rob Anderson informed Board members that long-serving, prior Board member, Harry Smith, passed away over the weekend. Rob indicated that Harry represented single- and two-family home contractors

on the Board for many years. Harry was a strong advocate and leader on many topical code issues and a true gentleman. Unfortunately, he contracted cancer a few years back and, after a lengthy struggle, passed away due to its effects.

Current single- and two-family contractor member, Mike McDowell, praised Harry for his leadership abilities and humanity. Mike and all Board members expressed great sympathy for his family and asked that a letter of recognition be forwarded on behalf of the Board.

Rich Crowley reminded Board members of the importance of participating in International Code Council (ICC) code change hearings and reminded everyone that on-line voting for qualified representatives is available.

12. **Adjourn.** On a **MOTION** by Kerry Dietz seconded by Lisa Davey it was unanimously voted to adjourn the meeting at approximately 1 p.m.

EXHIBITS:

- A. Meeting Agenda.
- B. *Mass Climate Action Network* letter dated November 14, 2018.
- C. Proposal Number 11-1-2018.
- D. Proposal Number 11-2-2018.
- E. Proposal Number 11-3-2018.
- F. Proposal Number 11-4-2018.
- G. Proposal Number 11-5-2018.
- H. Proposal Number 11-6-2018.
- I. Proposal Number 11-7-2018.
- J. Proposal Number 11-8-2018.
- K. Proposal Number 11-9-2018.
- L. Proposal Number 11-10-2018.
- M. Proposal Number 11-11-2018.
- N. Proposal Number 11-12-2018.
- O. Proposal Number 11-13-2018.
- P. Proposal Number 11-14-2018.
- Q. Proposal Number 11-15-2018.
- R. Proposal Number 11-16-2018.
- S. October 9, 2018 Board of Building Regulations and Standards (BBRS) meeting minutes.
- T. September 19, 2018 Building Official Certification Committee (BOCC) meeting minutes.
- U. Draft FAQ relative to *Intruder Prevention Hardware & Code Requirements*.
- V. Association of Pool and Spa Professionals (APSP) *PowerPoint Presentation*.