NEWSLETTER OF THE MAINE BUILDING OFFICIALS AND INSPECTORS ASSOCIATION.

> BY CODES ENFORCEMENT PROFESSIONALS. FOR CODES ENFORCEMENT PROFESSIONALS



MUBEC UPDATE NEARS COMPLETION!

At long last (that was easy...) the update to the MUBEC is just about complete. It's bags are packed, it's ready to go, it's standing just outside the door.... The Governor's on

board, it's been through rulemaking. The plan is to have it go live some time in early 2018. The update adopts the 2015 editions of the International Building, Residential, Energy, and Existing Buildings Codes, with amendments. The amendments are available on the Codes Bureau's website - marked as Chapters 3-6 on the front page of the site. Chapter 2 deals with Third Party Inspectors, and Chapter 1 deals with the MUBEC in general. It's been a long slog that looks like it may be coming to an end. We all owe a big thank you to Rich McCarthy for shepherding the thing through the process, and to the Codes Bureau/Board and folks from our Association who participated in the process.

ENFORCER

2018

MUBEC COMMUNITIES TO BECOME ICC MEMBERS!

Through a deal brokered between the State, MBOIA, and ICC, all municipalities that use the MUBEC, by statute (over 4000 population) or because they adopted it locally (under 4000 population) will be provided with free 18 month memberships to the International Codes Council, with Premium Access. As members, you'll be able to download and print the codes, and commentaries, have access to the ICC interpretive service, and have voting rights in ICC matters, as well as other privileges and services that come with membership. Details will be forthcoming as the MUBEC update is rolled out. For communities that are already ICC members, you'll receive credit for your dues that you will have already paid when the State funds your membership at MUBEC rollout time.

REDUCED PRICE CODE BOOKS WILL BE AVAILABLE

For people who prefer soft cover code books to downloaded, 3 ring binders, MBOIA will be buying books and making them available at discounted prices.

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ASSORTED ASSOCIATION ACTIVITIES



The 2017 Codes Conference was again excellent. Good instructors, good venue, timely, topical, interesting training, for a very reasonable price, just like always. Many thanks to Mark Stambaugh and his minions for putting the thing together. Well done. See the dates below for the 2018 conference dates, and note the new location at Point Lookout in Northport. Details are on page 18.

Our officers and directors meet monthly, to conducting the business of running the organization. There's a lot that goes on behind the scenes to make the Association function, and they do a nice job. This year's meeting schedule, which is or will be on the MBOIA website (www.mboia.org) is:

January 11th 9 AM Board of Directors meeting MMA Augusta Thursday Thursdav February 1st 7 AM Legislative Breakfast with the Maine Fire Chief's Association Senator Inn Augusta. February 1st 9 AM Board or Directors meeting MMA Augusta Thursday March 28-30 Maine Fire Chief's Assocation joint conference Sunday River Newry Monday and Tuesday, May 21st & 22nd MBOIA Codes Conference Point Lookout Northport 9 AM Board of Directors meeting MMA Augusta Thursday June 21st Thursday July 19th 9 AM Membership meeting MMA Augusta Membership meeting Spring Meadows Golf Club Gray Thursday September 27th October 30th 8 AM MBOIA/SFM/DECD sponsored training Fireside Inn Portland Tuesday Wednesday October 31st MBOIA/SFM/DECD sponsored training Black Bear Inn Orono Thursday November 1st MBOIA/SFM/DECD sponsored training Waterville Elks Club Waterville Thursday November 15th 9 AM Board of Directors meeting MMA Augusta Thursday December 13th 9 AM Membership meeting Green Ladle Lewiston

Check the website for changes.

Codes jobs available! CEO jobs are listed on the MBOIA website (www.mboia.org). The successful candidates will be part cop, part teacher, part priest, part referee, part playground monitor, part social worker, and partly crazy, in addition to knowing a thing or two about codes enforcement......

Many thanks to our officers and directors for all you do for us!

\$AVE MONEY ON TRAINING BY JOINING MBOIA!

If you are not a member of MBOIA and take training that The Association puts on, know that the training is usually free for MBOIA members, and <u>the cost of a membership</u> is usually less than the non member cost of the training! Do the math, and join up. Along with cheaper training, you get to stay on the cutting edge of Maine codes stuff, participate in the Mooosechat listserv, and enjoy all the benefits of membership! As they say upta deercamp, it's a no brainah.



William Gilmore is the 2017 CEO Of The Year!

Carrabassett Valley CEO Bill Gilmore was presented with the 2017 "Code Enforcement Officer of the Year" award at our July 20th meeting at the MMA building in Augusta.

A representative from the Selection Committee stated there were several impressive nomination applications sent in but Gilmore's record of achievement, his ongoing involvement and community commitment to both Carrabassett Valley and his hometown of Kingfield, and the respect he has achieved stood out among all applicants.

"It was an honor for me to have been part of the nominating process," Town Manager Dave Cota stated. "Bill has served the Town of Carrabassett Valley with distinction for over 30 years. His dedication, knowl-



edge, helpfulness and the respect he receives from contractors and citizens makes this award so very deserving. Bill is an important asset for our community. We are delighted that he has received this award."

In attendance for the presentation from Carrabassett Valley were: Selectman Chair Bob Luce and his wife, Jane, Selectman John Beaupre, former Planning Board Chairman Bruce Miles and Town Manager Dave Cota.

Congratulations, Bill, and thank you for serving our profession well!

Vintage Codes

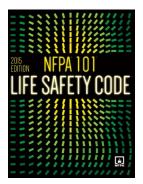
There are two kinds of codes officers. Those that have had to figure out what code was in effect at some time in the past, and those that will. With thanks to Rich McCarthy, below is a list of the editions of NFPA 101 that have been in effect in Maine, statewide, over the years.

NFPA 101

As far as seeing older editions of codes, or at least learning what a particular section says, use the Moosechat. Many towns adopted 101, and other codes (BOCA, etc.) locally over the years, and have copies kicking around. Libraries are also a good source for old codes. Many towns pro-

vided their libraries with copies of the codes they adopted, and with Interlibrary Loan, libraries can acquire books from other libraries around the state. If you want to buy vintage codes, you can sometimes do it on Ebay. ICC also has some older editions of codes for sale.

Happy hunting.



And now, put your antlers on, it's **Moosechat**

Lots of good Moosechatter bouncing around on the listserv again this year, on a variety of topics. Some highlights are below, in case you missed 'em, with some names and places deleted to protect the innocent (and not so innocent). There may be some questions and/or answers that were outside of the forum that people would benefit from seeing. Keep i

forum, that people would benefit from seeing. Keep in mind that most

of the answers are from CEOs, just like you, and their opinions mean nothing in your jurisdiction. They're just trying to help. If a response is from a State inspector, I credit them. Some of the responses are edited for space reasons, consolidated if the answer was in more than one email, and/or expounded on, such as by adding a code reference if it's useful. Some responses contain text that's just too funny and/or fantastic not to credit to the authors. **Please remember to include your name and email address in the body of your email, so people can reply to you privately if they choose to.** Thanks to those asking and answering the questions. This is a great, educational forum.

I'm glad I'm

not a Codes

Enforcement

Officer.

The Question: How Do You Condemn A Building?

Does anyone know the proper procedure for condemning a residential structure? We don't have much in our ordinances pertaining to it so I am wondering if there might be some references to it as part of MUBEC, Life safety 101, or some other state law reference.

An answer:

If it is a matter of conditions being unsafe and unsanitary, as opposed to violations of the Building Code, and the Town doesn't have a property maintenance or housing code, your Health Officer has broad discretion to order a building vacated under the State Public Health Laws

Another answer:

If you're a MUBEC town, see sections 110, 115 and 116 of The International Existing Buildings Code. 110 gives you the authority to revoke a Certificate of Occupancy is the building becomes out of compliance with code requirements. 115 details the process for documenting/notifying violations and issuing correction orders. 116 gives the CEO authority to order premises vacated if they're immediately/ excessively dangerous. MUBEC or not, see MRSA 30-A, section 4452. It gives you the authority and details on how to prosecute code violations. Another good resource is the Rule 80K training manual, available through the CEO certification office (Brianne Hasty). Even if you're not 80K certified, and will use the town attorney to prosecute violations, it's got lots of good info on court procedures and evidence gathering that will help you do it right. Also see the State's Dangerous Buildings Law (MRSA 17 section 2851). It details the process of having a dangerous building reviewed by the municipal officials (selectman, city councilors, etc.) who order corrections or demolition.

The Question: Slab on Grade Foundations

Applying the requirements of the 2009 IRC section R317 (protection of wood against decay) and section R403 (footings), I've been informing garage builders using slab on grade foundations that a haunch is required to extend at least one foot into the ground (R403.1.4) and the top of slab should be at least 6" above grade to avoid the need for PT materials in the exterior walls (R317.1#5). This makes the total height from top of slab to bottom of haunch footing 18". Any other







MUBEC officials interpreting the code this way? I'm getting the "I don't have to do that in other towns" complaint.

An answer (from one of our favorite structural engineers):

We interpret the code this way and draw our details accordingly. The haunched slab that most contractors have in mind for a garage is indeed quite different than what is permitted in the code. In our experience, once the contractor correctly understands the true haunch prescribed by combining these two sections of the code, they often revert back to a typical frost wall foundation which is often a better end product for similar cost.

The Question: House Concerts

(For the unfamiliar, house concerts are where people host public concerts in their homes.)

I am curious if any communities have dealt with house concerts, both from a zoning perspective as well as building / life safety code perspective. We have got one operating in Bangor that clearly is exceeding how house concerts are generally supposed to operate. Any insight and guidance would be helpful Thanks in advance.

An answer:

We haven't had any here in town that I know of, but a musician friend plays these things now and then, at various places around the state. If someone were hosting these events regularly, charging admission, etc., I'd treat it like the commercial activity that it is. They're operating a concert venue. Zoning, fire code, building code, sewerage disposal, parking. ADA, SFM permit if over 50 occupants – the whole 9 yards. The attendees have a right to safety, and the neighbors have a right to have the rules enforced.

The Question: Townhouse Fire Separation

Where can I find the requirements for fire breaks in a Town House situation? These are mini-homes 14' X 64', 30' X 64' including a 19.5' X 9.5, garage and driveway, one and three bedroom. Looks like 5 units in a group.

An answer:

If they're IRC, see IRC section 302, which requires one hour separating walls. They'll have to be sprinklered per section 313, and meet the IRC re-

quirements for room sizes (304), egress, etc.. If they're IBC, see section 709.3 for the fire separation. IBC 903.2.8 will require them to be sprinklered.

The Question: State Law Pool Fencing Requirements

Is there any state law requiring fences around pools? Inground or above gound?

An answer:

Title 22 1632 covers it:

§1632. Enclosure of swimming pool required

A fence shall be erected and maintained around every swimming pool, except that portable aboveground swimming pools with sidewalls of at least 24 inches in height are exempted. A dwelling house or accessory building may be used as part of this enclosure. All gates or doors opening through this enclosure shall be capable of being securely fastened at all times when not in actual use. [1983, c. 436, (NEW).]

1. Fence. "Fence" means a good quality fence or wall not less than 4 feet in height above ground surface and of a character to exclude children. The fence shall be so constructed as not to have openings, holes or gaps larger than 4 square inches, except for fences constructed of vertical posts or louvers, in which case, the openings shall not be greater than 4 inches in width with no horizontal members between the top and bottom plates. Doors and gates are excluded from the minimum dimension require-







ments.

[1983, c. 436, (NEW) .]

2. Swimming pool. "Swimming pool" means an outdoor artificial receptacle or other container, whether in or above the ground, used or intended to be used to contain water for swimming or bathing and designed for a water depth of 24 inches or more.

The Question: **Pool Covers**

I had in an inquiry as to whether or not safety pool covers meet the pool enclosure requirements in Maine. I see in the attached link that the ICC and the Association of Pool and Spa Professionals and the International Swimming Pool and Spa Code allow them under the 2015 code these in lieu of fence enclosure. Does anyone know if this is adopted in the state or not? I can't find anything that indicates that these are ok in Maine.

An answer:

When the 2015 codes go into effect next year the 2015 ISPSC will be

coming with it as it is referenced. This was a topic of conversation when the board reviewed the public comments as the appendix G no longer references the pool requirements. Towns will be able to adopt it or use it in the same way as the NFPA codes are used.

Another answer:

The 2015 I codes and the associated amendments that the State is looking to go to are listed on the Codes Bureau website. A standalone pool fence requirement is in State law: MRSA 22 section 1632 (see previous entry regarding pool fencing) If the subject pool is inground, it looks like the safety cover would not meet that requirement.

The Question: House Ventilation

New small house, MUBEC town. No vent over electric stove. Window in bathroom. Vent fan in bathroom vents to close to a propane tank. Contractor would rather remove the vent fan than move propane tanks. I thought minimum residential ventilation standard requires both

bathroom fan and kitchen fan? What is enforceable? Or is just this a standard that is unenforceable?

An answer:

The intake openings cannot be closer than 10' from a noxious source. But the exhaust openings only have to be 2' above the ground and not directed onto walkways.

R303.4.2 Exhaust openings. Exhaust air shall not be directed onto walkways.

Regarding the ventilation - if you enforce the Energy Code, IECC 2009 TABLE 405.5.2(1)-continued, the house does not need to have ventilation if it has an air exchange rate no less than 0.35 ACH. But it needs to be tested. Typically, it's building suicide not to use an exhaust fan in the bath. Circulatory vents are allowed in the kitchen in lieu of an exhausted unit. Regardless, the moisture winds up in the attic without an exhausted kitchen vent. Then Chapter 4 IECC 2009 covers the Mechanical Ventilation.

Another answer:

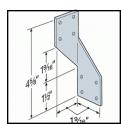
If you're a MUBEC town, ASHRAE 62.2-2007, Chapter 5 requires mechanical ventilation in the kitchen and all bathrooms unless alternative ventilation is provided that's stamped by a design professional.

62.2 is a standard, not a code, but as a standard, if you provide mechanical ventilation in the building, (which your building has (bathroom fans)), the ventilation has to be installed per the standard, hence the kitchen requires mechanical ventilation.

The Question: Hurricane Clips

Hello Mooses,

Okay, so I'm not an engineer and don't want to pretend to be one. This is for a single







family home. Hurricane clips on the truss/rafter to top plate connection: as a builder we always installed these. I have a builder telling me these are not always required. When I chase through the tables R302.2(2) & (3) and R802.11 it appears they are required for his 10/12, 25' tall roof. What he uses is a 2x6 block of lumber about 10" long nailed to the top plate and then nails the truss to it. (This 2x6 is not seismic blocking as described in the code.) My question is how do I tell him what size hurricane clip or screw to use? I don't think I should or could be the person telling him what size to use; this should come from his designer/engineer, correct?

An answer: We always get copies of the truss manufacturers cut sheet which addresses the attachment requirements and any bracing.

The Question: Moisture Control Requirements In Non MUBEC Buildings

Good evening code folks. The Amish in our non-MUBEC town are building and shipping 14' by 32' sheds as dwellings to the non-MUBEC towns in the Unity area. A local plumber call me to inspect the roof cavity of this 4/12 pitched shed roof after he cut into it to install his roof vent. The R-30 Kraft faced fiberglass insulation was incredibly wet. The insulation was installed with the Kraft side facing up in the cavity toward the underside of



the OSB roof sheathing. No felt paper or roof underlayment between the OSB sheathing and metal roof. There were no soffit vents or ridge vents for this roof system. There was no vapor retarder on the interior side of the insulation facing the v-match ceiling. The v-match boards of the cathedral ceiling had already started showing water staining from condensation on this 4 month old heated structure. I gave the home owner my verbal report stating that due to the size of her structure and the fact that the town was non-MUBEC there are no enforceable building codes to help her and she should get in touch with the Amish builder to get it fixed. She contacted the Amish and they sent out two local non-Amish contractors to fix the problem. The home owner called me the day they opened up the roof. The contractors removed the metal roofing, OSB sheathing, and removed the wet Kraft faced insulation. They reinstalled a layer of R-23 and R-15 Roxul unfaced insulation into the 24" wide 7 /14" deep roof cavity and still no vapor retarder facing the interior side of the heated structure. They reapplied the OSB sheathing with 1" by 4' by 8' blue board insulation on top of the sheathing under the metal roofing so still no roof venting. I do not believe this will fix her problem.

These structures are being shipped as dwellings. At the Amish's workshop a local electrician wires the smoke detector, GFI receptacles in kitchen area and bathroom. The structure is wired for heat pumps, washer dryer, stove, etc.. The panel is label with arc fault breakers installed. There are two egress compliant doors but the exterior stair are noncompliant concrete blocks. They are not regulated by the Manufactured Housing Board due to their small size. I gave the home owner a written report of all the IRC-2009 code violations as if this was a regular size dwelling. This roof was only part of the problems on this structure. As I've stated before, the MUBEC should be state wide and hopefully "Tiny Houses" will be part of the new IRC.

I welcome any opinions and comments concerning this roof system. Thank you.

An answer:

Without a building code, there's probably nothing illegal about the moisture control problems. The buildings are likely intended to be unheated sheds. If these things are being converted into dwellings, the State mechanical codes, NFPA 101, and the laws requiring smoke and CO detection, etc. all apply. Even if it's raining in the living room, the place is required to have code compliant plumbing, wiring, heating, fire & CO detection, and egress. The cost of meeting all those requirements is enough that it may push owners toward proper moisture control.

If these things are being built as dwellings before they're shipped to the customer, check with Bob Le-Clair at the Manufactured Housing Board to see if they are or should be involved. The fact that the plumber called you to inspect work he did on site points toward the things being shipped as sheds and

Another answer:

Bob LeClair and I have discussed the Amish sheds constructed by Backyard Builders in Thorndike with the CEO in the subject town, and have determined that these structures do not meet the definition of a modular home or dwelling unit. The structures as delivered do not meet the State building code, are completely unfinished (just a rough shell) with no plumbing or heating and are installed on blocks like a shed would be. In our opinion no MUBEC municipality in the State of Maine would allow these structures to be completely finished on-site and converted into dwelling units, however non-MUBEC municipalities may have little choice. Please feel free to contact me if you have any questions or concerns. Thanks and have a great day.

Sincerely, Ryan Chandler Senior Manufactured Housing Inspector (207) 624-8618 Ryan.E.Chandler@maine.gov "In my house, my wife is the Authority Having Jurisdiction." Ray Stanford, State Electrical Inspector May 22, 2017

The Question: Kitchen Sink Location

Any CEO/LPI's out there that can help me with the proper kitchen sink location (for the purpose of doing dishes)? There is a half-ass kitchen installed in an apartment and when I told the landlord she needed to install a kitchen sink so the tenants would not be doing dishes in the bath-tub, she chose to remove the lavatory sink and install a two-bay stainless kitchen sink in the bathroom vanity. (There are days I wonder about people's brain capabilities....never mind the yuck factor of doing dishes in a bathtub.) Thanks everyone in advance.



An answer:

UPC Table 422.1 may contain your answer. Each dwelling unit must have 1 tub/shower, 1 wc, 1 lav. & per note 4 they need to supply a kitchen sink for each dwelling or apartment unit.

Another answer:

See what the plumbing code required at the time that that the apartment was created. If created under the current plumbing code, which is not retroactive, it requires a "kitchen sink" in dwelling units. To me, that means that the kitchen sink has to be in the kitchen. If the apartment was created pre UPC, the same language is in the Appendix A "Minimum Plumbing Facilities" table of the plumbing code. See footnote 4.

Another answer:

If the apartment is in a two family building, and is subject to the MUBEC, IRC R306.2 says that each dwelling unit shall be provided with a kitchen area and every kitchen area shall be provided with a sink.

The Question: Junkyard/Auto Graveyard Permitting

I am writing to inquire if any municipality has imposed a limit on the number of cars that an automobile recycler may have on site at any one time? We received a Site Design Review application from an individual who has a used car sales business but has been told (by the Bureau of Motor Vehicles) that a form from the municipality affirming compliance with the requirements for a recycler is also needed due to the nature of the business. A discussion has taken place in the office about the statutes and what is required because the individual feels "singled out" for a higher standard than other existing businesses within the municipality. On Friday, an established operator with a re-



cycler license came in with a zoning renewal form. It is clear that if I sign the form, this business could expand into a junkyard / automobile graveyard – even though it does not fit the established criteria for such.

I have been told that it is possible to limit the number of automobiles located on site so that an automobile graveyard is not created (because they can absent of a formal limitation on vehicles). This is something I would like to bring to the Planning Board. I would appreciate any assistance.

An answer:

An automobile recycler also needs an automobile graveyard license if more than 2 uninspected or unregistered vehicles are on their property for more than 180 days. The automobile graveyard needs a permit to be renewed annually from the Selectman and must meet operating standards specified in state

law. The CEO usually inspects each graveyard before the permit renewal period to assure that the operating standards are being met and recommends to the Selectman whether the licenses can be issued. All the statutes that apply to this are in Title 30-A, sections 3751 to 3758. I think you can limit the amount of automobiles. The Selectmen are the approving authority not the Planning Board. Perhaps your ordinance also requires Planning Board approval?



The Question: State Blasting Requirements

Are there any State rules for blasting (such as pre-blast survey, notification to other property owners in the area, checking other structures in the area etc.) when developing a property? My town does not have an ordinance on blasting. I've checked with DEP. I am awaiting their response.

An answer:

Title 25 sections 2471-2477 contains the State rules for blasting.

Another answer:

The state rules require blasting contractors to be licensed, etc., but there are no state requirements for notifications or preblast surveys in the statute. Those things have to be legislated locally. We require blasting permits for any blasting done in town, and the contractor has to provide proof of insurance to get the permit. Sometimes our Planning Board will place a condition on an approval that preblast surveys be offered to owners of properties within a certain radius of a project, if neighbors showed up at the meeting with concerns about blasting. That creates extra cost for the developer (they contract the pre blast survey) and a pain in the butt for me since I then have to review their documentation about who was sent notices/offers. Sometimes properties have changed hands recently, and our Assessing office doesn't have the updated data, and those owners don't get notified, which puts the project in violation of its Board approval. If you regulate it all locally, I recommend just requiring blasting permits, with proof of insurance. Then if there's building damage from the blasting, the town doesn't have a dog in that fight. It's between the damaged property owner and the blaster's insurance company. Sometimes you govern best when you govern least.

The Question: Bad Builders

I have a property owner who is having a single-family home built. The person he hired has made many

mistakes on the home to a point where the homeowner had to hire someone else to fix all the problems. This is costing the owner a tremendous amount of money. I told this homeowner that his recourse is most likely going to have to come from the court system. He has asked me to reach out to find out if there are any other types of recourse he could take. He really wants to make sure that this contractor never does this to anyone else. Any suggestions are appreciated!



An answer:

I would recommend that the owner speak to the Attorney General's office. They will likely investigate if

they have multiple complaints about the same person. The attorney general's website has some good info on this including suggested contract language. Their web site: <u>http://www.maine.gov/ag/consumer/housing/home_construction.shtml</u>

Another answer:

Civil matter. Stay out of it. It goes to the courts.

The Question: County Buildings

I have a question regarding County government buildings. Are they built to commercial standards, or is there a separate standard for publicly owned buildings? Not a building inspector, but I'm leaning that it should be categorized as a commercial structure for construction sake.

An answer:

Unless it's a one or two family house, or attached townhouses, it would be built to the IBC in a MUBEC town.

The Question: What is a Dunkin Donuts?

What have folks been classifying a new Dunkin Donuts store as for occupancy? I was trying to make it fit in the (M) Group but the darn thing doesn't fit as a bakery

An answer:

Our D/D was recently approved as an IBC A-2 and NFPA 101 Class B Mercantile occupancy (sprinklers etc, 9.37.1.1(1)). It has a counter and about a dozen tables.

Another answer: I would say M since donuts are delivered there and sold. That would be different if seating was 50 or more, but I think that is not the norm. Not much different than a convenience store that sells coffee, pizza, etc., except that coffee and food is all they sell.

Another answer:

Restaurants with an occupant load over 50 are an A-2 use. Per IBC 303.1, Exception 1, a restaurant with an occupant load less than 50 is a B use group, even though a Dunkin Donuts to me seems more like an M, since a lot of people walk in and buy products and leave. If the thing has seats and you can eat there, I think that's a restaurant, and it would be a B occupancy. If there are no seats, I'd go with Mercantile.

The Question: European Windows

I have been seeing more and more windows coming from Europe. Does anyone have any insight regarding compliance with safety glazing standards (R308.3.1)? I am dealing with a single family dwelling with windows in the stairway. The windows meet a standard called EN 12600. This seems to be a reputable European standard but I'm not sure how to determine if it meets or exceeds our standards. Thanks.

An answer:

If the window is subject to IRC R308, I'd want documentation showing that the window meets CPSC 16 CFR 1201 as required by IRC R308.3, or has been tested/evaluated by a recognized agency and found to be equivalent. You can accept materials that don't meet the prescriptive requirements of the code if you're comfortable that the product provides equal or better performance (IRC R104.11). The vendor or manufacturer should be able to provide that if they're selling them here.

The Question: Fall Protection For Replacement Windows

In new houses, fall protection is required by section R612. IEBC 306 (Prescriptive Method) says glass replacement has to be like new. Arguably, that means that fall protection would











be required for replacement windows. IEBC Chapter 6 (Work Area Method) doesn't say anything about it (which to me means it's not required by that text). Section 604, if you feel that EEROS are part of the means of egress, says the replacement window has to maintain the level of protection provided by the original window, so a replacement window would not have to have fall protection unless the original window did. (EEROS are likely not part of the means of egress if you follow the code texts. Neither the IEBC nor the IRC define "means of egress". IRC R201.3 says to use definitions from other I Codes when none exist in the IRC. The IBC definition leads you back to the definition of "exit", which does not include windows".)

Do you require fall protection for replacement windows?

An answer: I have not required it. That does not mean that is correct !! Good question for ICC.

Another answer:

I've read R612 as a building component. EERO/Glazing are covered well in other sections, and being a part of a building being replaced, I treat it as new with respect to this section.

R612 is really a guard requirement but for some reason it's in the wall section, if it helps connect the dots, 612 has moved to 312 (Guards) in the 2015 code. To me, if you replace a guard on a deck that requires a guard, the replacement needs to meet loading, height, and opening requirements for new work, so the same (in my mind anyway) applies to fall prevention in 612... soon(?) to be 312. I'll second the ICC suggestion. I'm sure it's come up before.

I only catch these in renovations that require a permit. The ordinance exempts non-structural replacements from building permits so window replacements only don't get checked.

Another answer:

We do look for them as well as tempering issues with replacement windows. We do issue permits for replacement windows and doors as part of the energy code. We did not require permits in the past for windows along with roofing and siding as non structural.

The Question: Flue Sharing

Does anyone know the rules for having a furnace and fireplace in the same chimney? I was thinking they had changed them.

The Answer: The changes were to allow a solid fuel appliance (stove or central heat) and an oil burning appliance in the same chimney, but a fireplace as such is still not allowed. The statute is Title 32 Chapter 139 §18107, which I have copied below for your convenience.



§18107. INSTALLATIONS TO CONFORM TO STANDARDS

1. Board standards and rules. Installation of oil, solid fuel, propane and natural gas burning equipment and chimneys may not be made in this State unless the installation complies with all the standards and rules adopted by the board. These standards and rules may not prohibit:

A. The continued use of an existing connection of a solid fuel burning appliance to a chimney flue to which another appliance burning oil or solid fuel is connected for any chimney existing and in use prior to February 2, 1998 as long as:

(1) Sufficient draft is available for each appliance;

(2) The chimney is lined and structurally intact; and

(3) A carbon monoxide detector is installed in the building near a bedroom; or [2011, c. 225, §2 (NEW).]

B. The connection of a solid fuel burning appliance to a chimney flue to which another appliance burning oil or solid fuel is connected for any chimney existing and in use on or after February 2, 1998 as long as:

(1) Sufficient draft is available for each appliance;

(2) The chimney is lined and structurally intact;

(3) A carbon monoxide detector is installed in the building near a bedroom;

(4) The solid fuel burning appliance has been listed by Underwriters Laboratories or by an independent, nationally recognized testing laboratory or other testing laboratory approved by the board; and

(5) The solid fuel burning appliance is installed in accordance with the manufacturer's installation specifications. [2011, c. 225, §2 (NEW).]

Peter T. Holmes

Peter T. Holmes Senior Inspector Maine Fuel Board 446-2826 "My rule of thumb is if it's not clear to me what my ordinance means, it probably isn't to the guy who is subject to the enforcement provisions." **Tom Lister August 4, 2017**

The Question: Emergency Switch For a Gas Appliance

For some years, the gas codes did not require an emergency shutoff switch by the door to the room. I heard that new rules require this, just like with an oil fired appliance. Is this now required?

An answer: From the State Fuel Board rules:

13.8.2 Emergency Switch

13.8.2.1 For central heating equipment and water heating appliances where the interruption of an electrical circuit will arrest the combustion process, an identified emergency shutdown switch must be placed outside of and adjacent to the entrance of the room where the appliance is located.



- 13.8.2.2 An emergency switch shall not be placed outside of any building.
- 13.8.2.3 If the entrance to the boiler room is only accessible from the outside, the emergency switch may be placed at the inside not more than one foot beyond the door opening.
- 13.8.2.4 On multi-unit installations of commercial and industrial equipment, the emergency switch must be installed in accordance with Figure 13-1.
- 13.8.2.5 On multi-unit installations in other than one- and two-family residences, the emergency shut-off switch must be placed at the outside entrance of the room containing the appliances. The emergency switches and the thermal cut-off switches must be wired in series through individual unit relays so that, if the emergency switch is opened, all heating equipment in the room and any electrically operated gas valves will be rendered inoperable. This application also applies if there are two or more appliance rooms in the same building that are connected to a common fuel supply system.

13.8.3 Service Switch

For central heating equipment and water heating appliances where the interruption of an electrical circuit will arrest the combustion process, a service disconnect switch for control of the burner while observing the flame must be placed at the unit, within 3' of the burner.

13.8.4 Thermal Cut-Off Switches



Thanks to Justin Brown for being the Chat Sheriff, reminding people to include their email addresses, etc.....

- 13.8.4.1 For central heating equipment and water heating appliances where the interruption of an electrical circuit will arrest the combustion process, a thermal cut-off switch must be wired into the burner circuit to shut off the burner in the event of a fire at the unit. The switch must be placed at the highest point directly above the unit to be fired with the thermal element pointed downwards, and must be placed on the bottom of the floor joist or stringer at the front of the unit. In no case shall it be lower than the point where the flue connector enters the chimney. The switch must be wired to shut off the burner, circulating fan, forced or induced draft fan and any electrically-operated gas valves. A thermal electric switch is required for each electrically-powered gas-fired unit in a multi-appliance installation.
 - On multi-unit installations other than one- and two-family residences the emergency and thermal electrical switches must be wired in series through individual unit relays so that, if one switch is opened, all equipment will be rendered inoperable whenever the "EMERGENCY" switch is opened.

The Question: Repeat Offenders

I have a situation in which a particular excavator refuses to follow BMP's and we are constantly playing catch up as they move from job to job and have the same erosion issues. Their motto is essentially "We don't put it up unless you catch us". Each job gets the same enforcement and fine but we end up treating them each as a new violation. While it would be nice to tag progressive fines to the contractor rather than the job I am not sure there is any legal backing for us to do that. Anyone else dealt with (and solved) this issue in the past? We are tired of chasing.



An answer:

We've had some repeat offenders violate our Refuse Ordinance – multi- family property owners that repeatedly fail to have their dumpster emptied frequently enough, or at all. We prosecute them, and secure a court order having them correct the violation, pay our expenses and a fine for the violation that we prosecuted, (the biggest fine was \$35,000, figured at \$100/day), and it directs them to correct future violations within 48 hours of being notified, or we have the dumpster emptied, and bill the owner for the cost plus a surcharge/fine (often \$250), and we secure the bill with liens against the property. Money talks, and it speaks loudly. You might be able to arrange something similar through the court for your frequent flyer excavation hombre, with escalating fines for future violations.

Someone questioned whether a violator willfully paying a fine as part of a consent agreement requires a court order. I don't know the answer to that. (Maybe it's an out of court settlement? Check with your town attorney?) When we do consent agreements, they're usually the result of/associated with a prosecution, where we come to terms with the violator before the matter gets to trial. We proceed to the trial, and have the court bless the consent agreement, so it has the force of a court order, giving us some tools in case the violator doesn't hold up his end of the bargain.

The Question: Spiral Stair Riser Requirements

My question is about spiral stairs. I see in the code that these types of stairs are given special treatment, as far as riser height, stair width and headroom, but nothing else. I have received 2 calls in the last week regarding closing in the risers. I have been telling people that if its not mentioned under spirals then it is covered by the code for all stairs. As I think about spiral stairs, most of them I recall have no risers at all.

Usually a metal pole in the middle and each treat welded to the pole and nothing else. Am I missing something ?

An answer: You're not missing anything. Open risers are allowed on spiral stairs. If it's an IRC building, R311.7.9 says that the spiral stairs have to meet all the specs of 311.7 except the stuff that's particular to spiral stairs in R311.7.9.1. R311.7.4.3 says the risers have to be solid or meet the 4" sphere rule. If it's an IBC building, 1009.4.5 is the riser spec. It says that risers have to

be solid except for spiral stairs (exception 3), and exception 1 allows stairs that don't have to meet 1007.3 (accessible route –which I feel includes spiral stairs) can have risers that meet the 4" sphere rule.

The Question: Techno Posts

I have a builder telling me that he builds additions to homes "all the time in South Portland, Sydney ...all over Maine" (sure), on Techno posts with OSB covering the R-30 floor insulation for protection from the elements in the underside of the floor joists. I immediately said no and turned down his plans, but now I'm looking for some backup in the code and I'm not finding what I am looking for. I cannot find <u>specific</u> language requiring a concrete frost wall (at a minimum) supported by a full footer for heated/cooled house additions. Any help would be appreciated.

An answer: As long as the contractor provides me with the manufacturers spec. and proof of depth I have issued permits for this type of construction. I also researched the product used and observed the installation. One contractor also

had a stamped design for the pier setup using techno posts. Building on posts is allowed and in certain flood conditions is the only way possible. I talked to the building owners after the work had been through a winter or two and there were no issues.

Another answer: There needs to be the correct number of posts to support the structure, installed to the correct frost depth, by a certified installer. They have an ES report as well that shows they meet code: http://www.technopieux.com/wp-content/uploads/2014/10/2016-ESR-3418.pdf. The underneath needs to be closed in much like a wall with an Air Barrier. Insulation has to meet the prescriptive requirements. This is all covered in R104.11 Alternate materials, design, and methods of construction and equipment. R401.2 Requirements states that it has to meet the compressive loads as well frost protection the rest of the chapter talks to the standard forms of foundations. These post are also used to help solidify sinking foundations on soil that is problematic. They have been around awhile but have been slow in getting used here in Maine. Here is more info on them.

http://www.technometalpost.com/en-US/applications/residential-foundations/homes-buildings/ .

The Question:

Section 210.8 (A) (2) of the 2014 NEC specifies that GFCI protection is required for "Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms or limited to storage areas, work areas, and areas of similar use."

What does "at grade level" mean? A gent here in town wants to run power out to his workshop building. It's a detached wooden building, on short (10" or so) posts, with a wood framed floor. I'm wondering if the outlets have to be GFCI protected. In a garage, you're standing on a concrete floor, and your body provides a good path to ground for any errant current. In a wood building, up off the ground, standing on a dry wood floor,

your body doesn't provide much of a path to ground, and I would think that the chances of getting electrocuted would be fairly low. Do you feel that the outlets in this guy's workshop have to be GFCI protected per the code?

14





The Question: Water Lines Near Electrical Panels

Does the NEC prohibit water lines from being located over electrical panels? If so, what section of the code does that (110.34 F?)? If so, is there a specified distance that the line needs to be from the panel? The distance that water will spray if the line springs a leak will be a function of the pressure in the pipe, how the pipe fails, the orientation of the pipe, etc., all of which is a moving target.

The answer: See sections 110.26A and E:

110.26(A) requires 30" wide by 36" deep and 6.5' high working space, in front of the panel. Nothing can be there.

110.26(E): Dedicated equipment space. I usually explain this this way:

put the electrical panel against the wall where it is going to be permanently. Slide it to the floor directly below and then slide it to the structural ceiling above (suspended ceiling counts as the structural ceiling in this case). The panel should not be obstructed by anything from floor to ceiling. Outside of these spaces can be water pipes, pressurized or not. There's no distance mandated that the panel has to be kept from possible sprays or leaks.

Just have them keep stuff out of these 2 spaces and they are ok.

Raymond Stanford Senior State Electrical Inspector State of Maine Cumberland, Oxford, Androscoggin and Sagadahoc Counties raymond.stanford@maine.gov 592-7908

The Question: Sign Code vs Free Speech

I received the email below from a Trump supporter. Our sign ordinance does not adequately address whether the sign requires a permit or not for residential signs. Anyone aware of any statute that would regulate this? The signs are about 12 feet wide by 3 to 4 feet high and are plastered to the gate at the end of her driveway. When she puts them up, I'm sure people will be complaining. Any thoughts?

"I have ordered two new banners for my gate. The banners are in **SUPPORT OF PRESIDENT TRUMP**. The banners are not campaign banners, they are only banners of support for our President. I will keep my gate closed so that they **WILL NOT BE ON THE CITY EASEMENT**. Unfortunately when I put the banners on my gate I am sure my neighbor across from me will call you to complain about the banners. In this country we have FREEDOM OF SPEECH and I am just exercising my FREEDOM OF SPEECH! I support President Trump 1000 percent and my banners are to show my support for him because GOD knows in this liberal state he needs all the support he can get. If the people against Trump succeed in destroying him and his administration his supporters will rise up and it will not be pretty."

An Answer:

Title 23: TRANSPORTATION Chapter 21: MAINE TRAVELER INFORMATION SERVICES §1913-A. CATEGORICAL SIGNS

2-A. Signs outside the public right-of-way. Except as provided in section 1914, a sign may be erected and maintained outside the public right-of-way as long as it does not exceed 50 square feet in size. http://www.mainelegislature.org/legis/statutes/23/title23sec1913-A.html





Wiring Tip 47 A: Install quad

might go in bedrooms, for the

outlets where the head of the bed

lamp, clock, and electric blanket.

It's also possible you're sign ordinance is now unconstitutional due to the Supreme Court's Reed v. Town of Gilbert decision. The State of Maine recently amended the sign law in response. No more categorizing "noncommercial" signs, they're free speech. An excellent explanation of the Reed case by Drummond Woodsum can be found here: <u>http://www.dwmlaw.com/?t=40&an=45071</u>

Another answer:

My rule of thumb is if it's not clear to me what my ordinance means, it probably isn't to the guy who is subject to the enforcement provisions. Free speech is something you would want to be sure of before taking action. The ACLU is always watching. We updated our sign code to comply with the Reed case, which deemed content based signs unconstitutional (basically if you need to read the sign to apply the ordinance, the ordinance is in violation of free speech). In the amendment process I took the opportunity to redefine a sign as something that only applies to a commercial activity. Residential is no longer regulated.

Another answer: If it's a neighborhood with gated driveways, the neighbors are likely Republicans and won't mind.....

Paul Demers to step down as our President!

After 6 years as President of the Association, Paul will be abdicating the throne in December. Paul has served the Association in many capacities over the years, and we hope will continue to do so moving forward. He was elected in December 2011. He's been a front line warrior in many endeavors that MBOIA has been involved in during his presidency, particularly the efforts involving the MUBEC's existence and updating. He's done a lot for the Association, and has represented us well in Maine, and beyond, participating in regional and national ICC and other codes groups gatherings. He plans on remaining active in MBOIA, but his manager and wife will be glad that he'll have more time to do a little codes enforcement and work on The Honeydo List at home. Thank you, Paul, for your years of service!



Paul address 2017 codes conference attendees (out of the picture) from a podium which, along with a piano, is blocking the exit.



Safety is Job One on construction sites, which is why this gent is wearing hearing protection while using his skill saw.....

Wiring Tip 47 B: Install an outlet within 4' of the center of any window, for Christmas lights or an air conditioner, since an extension cord is a device that can be used for both good and evil.....

FROM THE CODE SCHMODE FILE:

Metal chimneys must be made of approved materials, properly supported. installed per the manufacturer's instructions, and must terminate at least two feet higher than any portion of the building within ten feet. (Thanks to Fred Cantu for the pic.)

F.U.



22. NOV. 2017 PM 3 1

City of Bath

Scott DAVIS

55 FRONT ST.

th. ME 04530

Some people appreciate the CEO's involvement

ants moved out and left piles of trash in the drive-

way and on the deck that the City had to remove

at the owners' expense. The check for the cost

was inside. The laugh was free.....

your community.

in their lives, and others, not so much... This was from the owner of a house where the ten-

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Mandatory Reporting of Child Abuse or Neglect

MRSA 22, section 4011-A requires municipal codes enforcement officials, State or municipal fire inspectors, and many other professionals to immediately report, by phone, to the Department of Child and Family Services (624-7900) when the person knows or has reasonable cause to suspect that a child has been or is likely to be abused or neglected, or that a suspicious child death has occurred. A written report may also be required within 48 hours if the Department requests it. Mandatory Reporters are required to take Department approved training at least once every four years. There's online training available here: www.maine.gov/dhhs/ocfs. There's also lots more information about the requirements there and in the law.

From the Who Knew File: Vacuum Breakers Are Not Always Required On Water Heaters....

If you've always been requiring vacuum breakers on water heaters, you don't need to anymore. Section 608.7 of the Plumbing Code specifies that they are only required if the water heater is above hot water fixture outlets.





KIDDE RECALLS MILLIONS OF FIRE EXTINGUISHERS

The federal government is launching a massive fire extinguisher recall of nearly 40 million Kidde plastic head fire extinguishers. The Consumer Product Safety Commission says 37.8 million fire extinguishers might not work during an emergency. The recalled extinguishers date back decades. The agency claims extinguishers with plastic handles and push button -- or pindicators -- can clog, resulting in a failure to discharge. Nozzles can also pop off with enough force to be a dangerous projectile. There have been nearly 400 reports of extinguishers malfunctioning resulting in 16 injuries and one death. Kidde will replace defective extinguishers for free with new ones made with metal parts. The list of recalled models is available on the company's website (www.kidde.com), as well as the website of the Consumer Product Safety Commission, <u>cpsc.gov.</u> Kidde's customer service phone number is 855-217-0773.





The second little pig built his house out of sticks. Not understanding the importance of wall bracing, he didn't sheath the walls, which made The Big Bad Wolf's job that much easier.....

This is actually a house in Harpswell that came down during the Halloween storm. No pigs were harmed in the collapse.

Thanks again to Fred Cantu for the pics.

Three contractors were visiting a tourist attraction on the same day. One was from Texas, one from Florida, and one from New York City. At the end of the tour, the guide asked them what they did for a living. When they all replied that they were contractors, he said, "Hey, we need one of the rear fences redone. Why don't you guys take a look at it and give me some bids?" They all went to check it out. The Texan measured the job, did some figuring, and said "\$700. \$300 for materials, \$400 labor". The Florida contractor did some measuring and figuring, called his office, and said he'd have to get \$900 for job. The New York guy, without event taking his hand out of his pockets said he'd do it for \$2700. The guide asked how he came to that figure. He said, "\$1000 for me, \$1000 for you, and we hire the guy from Texas."

NEW VENUE FOR THE 2018 CODES CONFERENCE!

This year's MBOIA codes conference will be at Point Lookout, in Northport, on May 21st and 22nd. The resort offers all sorts of amenities, and should serve our needs nicely. Information about the conference will be forthcoming, including rates on accommodations. This conference is a great way to get a lot of training for a very reasonable price. There will also be the usual vendors, raffles, prizes, etc. and opportunities to do a lot of networking with fellow CEOs, which is always worth the price of admission. We hope you can join us.



Where Can I See Them Codes?

While the codes are copyrighted materials you usually have to pay a lot of money for, anyone with access to a computer can view the I-codes, and the NFPA codes on line, for free! This is a great tool for contractors, design professionals, and codes officials. You can access the NFPA codes on the NFPA website - www.nfpa.org. (You'd be wise to use a browser other than Internet Explorer for this.) You can see the I-codes on the ICC website - www.iccsafe.org. You can't print or copy all of these unless you're a member, but they're a great way to see what a particular code text says, which sometimes is all you need. Information is power. Know where to get it!



THANKS FOR READING

I hope you've gotten something interesting and/or useful out of this edition. If you did, great. If not, sorry - there'll be another one next year. I try to be as accurate as possible, but I'm human, some of the information is secondhand (some used with permission, some without...), and I'm at the mercy of my sources. This newsletter will be posted on the MBOIA website.

I hope you've enjoyed The Enforcer.



Scott Davis

Bath Codes Enforcement Officer

443-8334