WENFORCER

NEWSLETTER OF THE MAINE BUILDING OFFICIALS AND INSPECTORS ASSOCIATION.

BY CODES ENFORCEMENT PROFESSIONALS. FOR CODES ENFORCEMENT PROFESSIONALS

2020



MUBEC FOR EVERYONE!

(WHO'S BUYING THE DRINKS?)

On June 19th, the Legislature passed and the Governor signed LD 1509/HD 1101, updating the Maine Uniform Building and Energy Code (the MUBEC). As it's explained, as of September 19th, the MUBEC is in effect everywhere in Maine. Municipalities over 4000 population have to enforce it. Municipalities under 4000 do not have to enforce it, but can opt to do so if they choose to (but it's in effect in those towns, whether they choose to enforce it or not). The Codes Board has to take action to fine tune the MUBEC, as detailed below.

From MRS 10 section 9722: 6. The Board shall:

A. Adopt rules in accordance with the Maine Administrative Procedure Act necessary to carry out its duties under this chapter. Rules adopted pursuant to this chapter are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A;

- B. Adopt, amend and maintain the Maine Uniform Building and Energy Code;. The board shall ensure that the Maine Uniform Building and Energy Code consists of the following codes and standards:
- (1) The International Building Code
- (2) The International Existing Building Code
- (3) The International Residential Code
- (4) The International Energy Conservation Code
- (5) The International Mechanical Code
- (6) ASHRAE Standard 62.1 Ventilation for Acceptable Indoor Air Quality
- (7) ASHRAE Standard 62.2 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings
- (8) ASHRAE Standard 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings
- (9) Standard Practice for Radon Control Options for the Design and Construction of New Low-Rise Residential Buildings

Codes and standards adopted under this paragraph are mandatory, except as provided in paragraph B-1. The board shall ensure that each new edition of a code or standard adopted under this paragraph is reviewed by the

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Board, and that each code or standard adopted under paragraph B is either the most recent edition or the edition previous to the most recent edition of that code or standard;

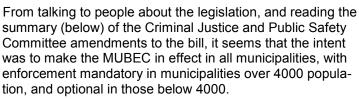
- B-1. Ensure the following in adopting and amending the Maine Uniform Building and Energy Code:
- (1) That historic preservation is a policy priority by ensuring that: (a) Provisions of model codes and standards intended to facilitate the continued use or adaptive reuse of historic buildings are maintained in the adopted versions of the Maine Uniform Building and Energy Code; and (b) The board proactively identifies additional or alternative compliance means and methods for historic buildings in the adoption and amendment of the Maine Uniform Building and Energy Code;
- (2) That nontraditional or experimental construction, including but not limited to straw bale, mass timber and earth berm construction, is permissible under the Maine Uniform Building and Energy Code
- (3) That building materials from local sawmills, including but not limited to nongraded lumber, are permissible under the Maine Uniform Building and Energy Code
- (4) That buildings used to house livestock or harvested crops are not subject to the Maine Uniform Building and Energy Code;

[Editor's Day To Day Takeaway: Until the Board does these things, the MUBEC prohibits ungraded lumber and applies to agricultural buildings used to house livestock or harvested crops. Once the Board acts, ASHRAE 62.1, 62.2, and 90.1, and ASTM 1465-E (the radon standard) will become codes/required, ungraded lumber will be allowed, and most agricultural buildings will be exempt.]

At the time of this writing (early December), if you go to the State's website to learn more about this, you will be confused, since some of the texts about this have not been updated to reflect the new law.

Administration of the MUBEC has been moved to the State Fire Marshal's Office. Rich McCarthy is in charge of it. (You should have received some emails from him about training opportunities.) Right now it's just him, and he still has fire marshal stuff to do, but he'll be assembling some staff to help him with the MUBEC administration. (Rich is a card carrying member of The Full Plate Club...).

But is The MUBEC really in effect in towns under 4000 population?







Committee Amendments Summary: This amendment strikes and replaces the bill and makes the following changes: 1. Lists as mandatory the specific codes that must comprise the Maine Uniform Building and Energy Code; 2. Requires that each new version of a code or standard that is part of the Maine Uniform Building and Energy Code must be reviewed as it is published and that the Technical Building Codes and Standards Board must adopt either the most recent edition or the edition previous of each code or standard; 3. Makes the Maine Uniform Building and Energy

Code applicable statewide but does not require municipalities under 4,000 residents to enforce the code; and 4. Provides that the Director of the Efficiency Maine Trust serves as a nonvoting member of the Technical Building Codes and Standards Board.

The legislation deletes the text below, that says that the Code is not in effect in sub 4000 towns, from MRS 10 section 9724, subsection 1-A:

"Notwithstanding any other provision of this chapter or Title 29 25, chapter 314, the provisions of the Maine Uniform Building Code, the Maine Uniform 30 Energy Code or the Maine Uniform Building and Energy Code do not apply in a municipality that has 4,000 or fewer residents except to the extent the municipality has adopted that code pursuant to this subsection."

It seems that the intent was to have the MUBEC be in effect in the sub 4000 towns, even if they don't choose to enforce it, but does the law do that? See what you think.

The final product, from the Legislature's page of the State website reads:

10 MRSA §9724, section 1-A "Municipalities up to 4,000 residents. A municipality of up to 4,000 residents is not required to enforce, but may not adopt or enforce a building code other than the Maine Uniform Building Code, the Maine Uniform Energy Code or the Maine Uniform Building and Energy Code."

"Not required to enforce" in section 1-A implies that the MUBEC is in effect in a town under 4000 population, but "may not adopt or enforce a code {other than the MUBEC} implies that they have to adopt it locally to enforce it. Nowhere in the law does it say that the MUBEC is in effect in all Maine municipalities, or that it is in effect in towns under 4000 population. If your town is under 4000 population, you and your town attorney (and maybe a judge, depending on the circumstance) will have to figure this out. Good luck.

IRC Errata Alert!

If you are using a first printing edition of the 2015 IRC, your life just got a little easier, because the book has a section 324.7, regarding spacing requirements for photovoltaic panels on roofs, that is not part of the code, and shouldn't be in there. From ICC:



"There is published errata on the ICC website that removed Section R324.7 and its subsections from the 2015 International Residential Code. The code change proposal that sought to add that information for the 2015 edition was actually disapproved, so it should never have appeared in the 2015 addition. However, please be aware that Section R324.6 (Roof access and pathways) and its subsections add similar requirements to the 2018 edition of the International Residential Code."

This may be a rare instance of someone who says "No one else is making me do this" telling the truth.....

"I'd rather educate than litigate."

Bill Hudson, ICC instructor, talking about plan review, and helping people get the project right before construction starts.



ASSORTED ASSOCIATION ACTIVITIES



The 2019 Codes Conference was again excellent. Good instructors, good venue, timely, topical, interesting training, a killer band, 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 2020 conference dates, back at Sebasco Estates in Phippsburg, since Point Lookout closed (bummer...).

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:

Thursday January 23rd 9 AM Board of Directors meeting MMA Augusta

Thursday February 13th 7 AM Legislative Breakfast with the Maine Fire Chief's Association

Senator Inn Augusta.

Thursday February 13th 9 AM Board or Directors meeting MMA Augusta

March 25-27 Maine Fire Chief's Association/MBOIA joint conference Sunday River Newry

Wednesday, 3:15 PM MFCA joint meeting

Thursday, 9 AM MBOIA training session and meeting

Friday, 9 AM MFCA training session

Thursday April 23rd 9 AM Board of Directors meeting MMA Augusta

Monday and Tuesday, May 18th & 19th MBOIA Codes Conference Sebasco Estates Phippsburg

Thursday June 25th 9 AM Board of Directors meeting MMA Augusta Thursday July 16th 9 AM Membership meeting MMA Augusta

Thursday September 24th 9 AM Membership meeting Fireside Inn Portland

Thursday October 15th Board of Directors meeting MMA Augusta

Tuesday October 27th 8 AM MBOIA/SFM/DECD sponsored training Fireside Inn Portland Wednesday October 28th 8 AM MBOIA/SFM/DECD sponsored training Black Bear Inn Orono Thursday October 29th 8 AM MBOIA/SFM/DECD sponsored training Elks Club Waterville

Thursday October 30th 8 AM Board of Directors meeting MMA Augusta

Thursday December 10th 8:30 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 lawyer, 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 the cost of a membership 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 (when it's back up) and enjoy all the benefits of membership! As they say upta deercamp, it's a no brainah.

Randall Gray is the 2019 CEO Of The Year!

Randall Gray, a 38 year employee for the town of Skowhegan, was named this year's Codes Enforcement Officer of the Year. Randy grew up in Skowhegan, and other than a stint working for the City of Augusta, has spent his entire career there. He was known to be knowledgeable, fair, and gracious. In the dedication of this year's Skowhegan town report to Randy, the opening line says that "his dedication to the Town of Skowhegan has been exceeded only by the way in which he delivers it—with good natured respect". In addition to being the CEO, Randy was the Solid Waste Supervisor, Acting Town Manager regularly, and the go-to guy for issues with Municipal Building. Randy retired this year, and plans on spending time with his family and in



his workshop making furniture. Congratulations, Randy, and thank you for serving our profession well!

THE MAINE PLUMBING CODE IS NOW AVAILABLE ONLINE!



Following in the footsteps of ICC, NFPA, and other code agencies, the Plumbing Code is now available on the IAPMO website (www.iapmo.org), making it more available to codesfolk, plumbers and anyone who wants to see it. Thank you IAPMO!



Vintage Codes

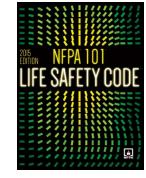
There are two kinds of codes officers. Those that have had to figure out what code was in effect at some time in the past, and those that will. With thanks to Rich McCarthy, below is a list of the editions of NFPA 101 that have been in effect in Maine, statewide, over the years. Thanks, Rich!

NFPA 101	
Edition year	When adopted
1959	October 21, 1959
1963	April 20, 1966
1970	May 30, 1972
1981	June 30, 1982
1985	September 30, 1085
1988	September 1, 1988
1991	August 5, 1991
1994	September 1, 1994
1997	January 2, 1999
2000	August 7, 2001
2003	September 1, 2003
2006	September 3, 2007
2009	September 3, 2011

As far as seeing older editions of codes, or at least learning what a particular section says, use the Moosechat, and/or ask other CEOs. 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 provided 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.

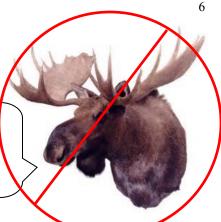


Take the antlers off, it's

Moose/Codeschat

Sadly, the Moosechat was terminated for a good part of the year, due to IT problems with viruses. I'm told by MMA staffers that it will be back up in the coming months, likely on a different platform than the old one. We all hope it comes back. It's

I'm still glad I'm not a Codes Enforcement Officer.



a useful tool and a great perk of MBOIA membership. Just because The Chat was down, that didn't mean that there weren't CEOs asking questions of each other. Some of the entries below are from the

Moosechat, and some are from the Same Game, Different Sponsor file. As with the Moosechat, most names have been omitted to protect the innocent, and those less so. If a response is from a State inspector, I credit them. Sometimes responses contain text that's just too funny and/or fantastic not to credit to the authors. If/when the Moosechat is restored, please remember to include your name and email address in the body of your email, so people can reply to you privately, easily, if they choose to. Thanks to those asking and answering the questions. We can all learn from questions and answers about stuff we all deal with every day...

The Question, re garage-house separation:

Hi all. I had a garage door with the spring hinges that would not shut because the hinges were not strong enough. I noticed there is no definition of self-closing in the code. Are these hinges worth the bother? Would you have failed this set-up? I did not.

An answer:

We see the loaded hinges on fire doors all the time and we find that if the door is shutting properly, then they work fine.



Another answer:

The Life Safety Code © is very specific with no exceptions regarding hardware for doors, both regular doors and listed rated fire doors.

2009 NFPA 101 7.2.1.7.2 Only approved panic hardware shall be used on door assemblies that are not fire-rated door assemblies.

Only approved fire exit hardware shall be used on fire-rated door assemblies.

I would encourage reading the Life Safety Code Handbook for the explanation and intent of this section.

[Editor's note: IRC 302.5.1 requires a solid wood door, at least 1 3/8" thick, a metal clad door, or a listed 20 minute rated door. Regular spring loaded hinges are acceptable on the first two, since the code is not specifying a rated door or assembly, and those doors are not tested a such. The listed 20 minute door is a listed, rated door and requires the hardware, including hinges, that it was tested with/ approved with. The garden variety 20 minute rated door comes prehung, with spring loaded hinges.]

Yet another answer:

See the 2015 IBC definition of self closing ("as applied to a fire door or other opening protective, means equipped with all device that will ensure closing after having been opened"). Note that it doesn't specify that the door has to latch. IRC 201.3 lets you use definitions in other ICC codes when a term is not defined in the code you're looking at. None of these definitions say how open the door has to be when you let it go to see if it closes/latches. Putting on my AHJ hat, I like it to latch from the 45 degree/half open position, which is how the door is most often opened/used. Most spring loaded hinges are adjustable. If the door won't latch with them adjusted to the max, they need to use heavier or more hinges.

The Question, re vapor control for an unheated basement:

If a person decides to insulate the floor of a home (single-family, full basement) instead of the basement walls, a vapor barrier is required on the ceiling even if one was installed under the basement floor, correct? (still separates unconditioned space) In this case, a contractor installed unfaced fiberglass insulation under a new modular home, between the floor joists. Shouldn't it be covered with poly? Code reference?



Gotta love the phrase: "No one else makes me do it!" LOL

The answer (from a highly regarded energy efficiency/building science guy):

All Vapor Retarders (Class 1, 2 and 3) are to be installed to the "warm-in-winter" side of the assembly. For floors you will not find a requirement for VR, but you will find in 2015 IRC Section N1102.2.8 "Exception", where it defines when you have an Air Barrier on the underside of the floor framing and look at Table N1102.4.1.1 under "Floors", where it states that any exposed edge of insulation shall have an air barrier.

So, your answer is you need an air barrier, not a vapor retarder. Hope this helps.

The question, re auto graveyards:

I have a resident in my town who has 6 vehicles in the yard that do not have valid registrations on them. I cannot tell whether any of them are inspected, because the vehicles face away from the roadways, and one vehicle is behind the house. The Maine Bureau of Motor Vehicles informs me that there are no vehicles registered to the residents that reside on the property. Last time, I sent a Notice of Violation letter about the vehicles, they stated that three (3) of the trucks on the property are "plow trucks". The Maine Bureau of Motor Vehicles confirmed that if the trucks are being used on the property



that they are located on, they do not need to be registered. However, if the trucks go on the road to drive to other locations to plow, then they need to be registered. If the trucks are used on the property they are located to plow, do they have to be inspected, and have an valid inspection sticker on them? An automobile graveyard is defined by the State as "a yard, field or other outdoor area used to store 3 or more unregistered or uninspected motor vehicles, as defined in Title 29-A, section 101, subsection 42, or parts of the vehicles. As required by Title 30-A Section 3753, "A person may not establish, operate or maintain an automobile graveyard, automobile recycling business or junkyard without first obtaining a nontransferable permit from the municipal officers or the municipality in which the automobile graveyard, automobile recycling business or junkyard is to be located, or from the county commissioners of the county of any unorganized territory in which the automobile graveyard, automobile recycling business or junkyard is to be located."

Thank you for any help with this.

An answer:

Several thoughts that might be useful:

MRS 29A 351 says that vehicles not operated on public roads don't need to be registered.

29A 1751 says that vehicles required to be registered are required to be inspected annually.

I feel that if the vehicles are unregistered <u>or</u> uninspected, they count towards the auto graveyard calculation. If they are unregistered, whether they have inspection stickers on them is irrelevant. If they have invalid inspection stickers on them, whether they are registered or not is irrelevant.

Check the referenced statutes, but I don't thing there's anything in them about plow trucks. I feel that if

the place has more than two unregistered or uninspected vehicles, it's an auto graveyard. He can have two unregistered/uninspected plow trucks (that are not legal to drive on public roads), but the rest have to become registered and stickered to remain on the site outdoors. He can put them indoors and they don't count toward the auto graveyard count.

Another aspect of it is zoning. Are the vehicles all his? If not, storing them on his property is likely not an accessory use to his primary use of the property.

He may claim that he's a "hobbyist", and will be restoring them. If that happens, chat with the town attorney and ask his or her advice. I'd take some pictures of them, and wait 6 months or so, and revisit the matter. If they haven't changed, I think a judge would agree with you that they are not being restored. Are they "up on blocks"? Take a Google Maps or Google Earth (Google Earth lets you zoom more than Google Maps) picture of the one behind the house if it's visible. If you can, maybe take some pics from abutting property, with the owners' permission. They likely want to help you bust him to improve the neighborhood.

Good luck.

The question, re burnt house demolition:

Hi Everyone,

When a house burns down, how long do you give the owner to clean up the rumble or standing charred remains?

Thanks.

An answer:

It depends on the age of the house. If it is pre-1978 then the ash/burn debris will need to be tested for total lead and possibly TCLP lead. The tests take time. I require the burned area be

covered by tarps to help prevent the infiltration of contaminants into the ground area until the lead tests have cleared.



If there's no insurance bookwork holding up the demolition, the time I give them depends on the hazard presented. Are parts going to come off in a high wind? Will those parts land offsite? Specify a time that you feel is appropriate, and that you feel a judge would feel was appropriate, if court becomes necessary. If they don't abide by your directive, use the Dangerous Buildings law (MRS 17 2851) to have the thing condemned and ordered repaired or demolished by the town. You can also prosecute the matter via the courts, as detailed in the Dangerous Buildings text. We've done a few here where after the owner failed to comply, we funded the demolition and placed a lien on the property for the costs, and got reimbursed down the line when the property sold.

The question, re condensate disposal:

I just had a plumber ask me about air-conditioning units, and/or condensing appliances whether they have to be plumbed into the drainage system, instead of draining directly to the outside. Section 814.0 "Condensate Waste and Control" Subsection 814.1 allows "Condensate to be collected and discharged to an approved plumbing fixture or <u>disposal area</u>." Does this allow an air-conditioning unit, and/or condensing appliances to drain to a dry well or leach pit?

An answer (made from two):

"Approved" means acceptable to the AHJ, which is you, so you can have them run the drainage wherever you see fit. Condensate from an air conditioner is clean water, so there's no need to treat is treat it through a septic system or sewer treatment plant. Con-



densate from heating appliances is acidic and needs to be treated/neutralized before being disposed of, but it doesn't have sewerage in it. Follow the installation instructions for the unit. It likely doesn't have be treated as sewerage. (Thank you Dana Tuttle for part of this answer).

The Question, regarding generator siting:

I've been asked if a permanent, LP gas fired generator can be installed on a wooden deck at a single family house.

Article 445 of the NEC doesn't speak to this specifically. 445.10 says that the generator needs to be suitable for where it's located and comply with 430.14. 430.14 doesn't seem to answer the question. An informational note says to see NFPA 37 for specs on the exhaust location.



Question 1: What edition of NFPA 37 applies to this matter? The 2006 edition is adopted by the Fire Marshal's Office. Is a different edition referenced by the NEC? Most codes have a chapter or appendix of referenced publications that apply to the code. I don't see anything like that in the NEC, so I must be looking in the wrong place.

Question 2: Does all of NFPA 37 apply to this situation, or just the part about the exhaust location? (see NFPA 37 text below) If all of it applies, section 4.2 says that engines must be on a foundation or secured to a noncombustible framework. (also see below)

Question 3: Would a concrete slab on a wooden deck constitute a "noncombustible framework"?

If NFPA 37 only applies for the exhaust aspect of the generator, it seems that if the manufacturer's instructions allow the generator to be installed on a wooden surface, that might satisfy NEC 430.14.

The generator would obviously have to meet the applicable requirements for distance from combustibles, walls, intakes, etc., and I would require an engineer's stamp on the supporting structure. (A 14 KW Kohler unit weighs about 500 pounds)

Thanks for any light you can shed on this.

The answer:

NFPA 37 requires that a generator be 5' from a building unless it meets certain testing parameters proving that a fire inside the cabinet can't get out. If it meets that requirement it reverts back to the manufacturer's instructions as far as the structure goes but still must be 5' from an opening. That being said, all manufacturer's instructions require some distance from the structure and since the porch is part of the structure, the answer is no it cannot go on a porch. We consider porches as part of the building so even generators beside a porch or its supports have to meet the distance requirements, and this also prevents them from being installed under a porch.

Peter T. Holmes Senior Inspector Maine Fuel Board 446-2826

The question, re hurricane clips:

At last Friday's MIAQC class we were taught that hurricane clips (plate to truss or rafter) always go on the exterior and should be connected to the exterior sheathing as well as the top plates. This must be a common mistake by some builders because I have often seen them installed on the interior.

Does anyone agree/disagree?



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

Unfortunately, I believe this is incorrect information.

Refer to the hurricane truss manufacturer catalogue for installation requirements.

From Simpson products, see the appropriate catalogue page. H/TSP Installation notes say hurricane ties can be installed with flanges facing inward or outward. Footnote 6 says hurricane ties are shown on the outside of the wall [in the diagrams] for clarify and states that installation on the inside of the wall is acceptable.

https://embed.widencdn.net/pdf/plus/ssttoolbox/ryhrnggnpo/C-C-2019-p270-272.pdf

I suggest you request the presenter review their information. Perhaps there was a miscommunication somewhere. Hopefully this can be corrected for the whole group.

The question, re marijuana and the IBC:

Hi All.

I am dealing with my first new marijuana cultivation facility here and was wondering how other places might be classifying the occupancy of such things.



An answer:

A commercial grow facility is a Group F occupancy, a retail dispensary is a Group M occupancy, and an extraction process is a Group H occupancy. I thought we had someone give a talk on this at one of our MBOIA quarterly meetings? Or maybe somewhere else and this is what the PowerPoint printout that I have says. There are some waste disposal issues with large grow facilities that you should be aware of.

The questions, re a transfer switch and sub panel wiring:

A project here in town involves installing an automatic transfer switch with a service disconnect in it. The wire from the switch to the 200 amp house panel will be 4 wire SE cable. The existing house panel will have the bonds and neutrals separated. The house panel feeds two sub panels with three conductor wire. Do those lines have to be replaced with 4 conductor wire and have the neutral isolated? I don't know how old the setup is, but it seems to me that those sub panel feeds likely should have been 4 wire from the get go.



Thanks in advance for your input.

The answer:

250.24A5. This may not be linear but.....

The existing 3 wires from the old main panel (now a sub panel) to the other panels were probably installed before 2008 so they are legal until someone tampers with any part of that wire. So they do not have to be changed. The wire from the new transfer switch (service disconnect) to the now sub panel has been messed with and needs to be brought to current code which extends to the sub panel itself: thereby driving the requirement to separate the grounds and neutrals in that panel.

That's my opinion, we welcome yours.

Raymond Stanford Senior State Electrical Inspector State of Maine raymond.stanford@maine.gov 207-592-7908

THE 3 Ps

Always practice The Three Ps of customer service:
Pleasant, Polite, and Professional. Every day, every way. If you don't, it only reflects poorly on you. Stay on the high road. Our customers cannot shop anywhere else, and they deserve top shelf service, even when they're behaving like they don't..... Ed.

The question, re right of entry:

How do people handle entering basements of a multi-family dwelling that are unlocked? Are these considered "common areas" if unsecured? Does the owner have the ability to tell you that you should not have entered a basement even if unsecured?

An answer:

I don't go far into a building unless someone with the authority to do so tells me it's OK. I'll go into the lobby or entryway of a multi family if it's common space, to knock on the apartment door to find the tenant I have an appointment with. Contractors certainly have the authority to have you come look at work they did in the basement. Sometimes tenants have access to a multi family building basement, such as if their electrical panel is down there, and sometimes they don't. If a tenant says they have access to the basement and wants to show me something down there, that they're complaining about, I'll take their authority at face value and go with them to look. If the building owner disputes the tenant's authority, that's between them. I generally don't go into private space in a building unaccompanied, in case someone contends that something was broken or missing after I was there. I don't need that, and neither do you. (The accusation is on page one. The retraction is on page 12.) Chapter 6 of the CEO Certification Manual (https://www.maine.gov/decd/meocd/ceo/publications/Legal%20Issues%20Manual%202017.pdf) has good stuff on right of entry.

Bring a good flashlight, and watch out for the catshit and cobwebs.

The question, re septic pump wiring:

A septic installer is asking me if a septic pump has to be on a dedicated circuit or not. The septic system code says that the high water alarm cannot be on the same circuit as the pump, but is moot on how to feed the pump. Does it have to be on its own circuit, or can the pump be fed from a circuit that supplies other things as well?



Thanks for your help.

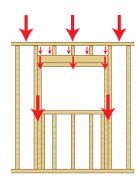
The answer:

As long as it is less than 50% of the branch circuit it satisfies 210.23A2.

Raymond Stanford Senior State Electrical Inspector State of Maine raymond.stanford@maine.gov 207-592-7908

The question, re shimming bottom plates on walls:

Has anyone ever run into this before? The top of the concrete wasn't level and wasn't corrected before they started building the garage walls. Now they are using pieces of shingles as shims under the wall. What's the best way to correct this at this point in time?



An answer:

I'd have them have an engineer design them a fix. The Code anticipates that the bottom plate bears on the foundation fully.

Another answer:

Either tear the wall apart and cut the studs different length to conform, or if the bolts are long enough jack it up an fill with either wood or slush with mortar. Way back we use to slush the sill plate with mortar to slow air from blowing in. They need to call a design professional.

The question, re selling a house in the shoreland zone with a septic system:

I seem to recall coming across a rule/code that referred to a requirement for septic/waste disposal systems to be brought up to current code standards when a property is up for sale within the shoreland zone. I have not been able to find that information again. Can anyone tell me if I am remembering that correctly and where I can find the information?



The answer:

You're likely thinking of MRS 30-A, section 4216:

4216. Transfers of shoreland property

Shoreland areas. Any person transferring property on which a subsurface waste water disposal system is located within a shoreland area, as described in Title 38, section 435, shall provide the transferee with a written statement by the transferor as to whether the system has malfunctioned during the 180 days preceding the date of transfer.

A. A person purchasing property on which a subsurface waste water disposal system is located within a coastal shoreland area, as described in Title 38, section 435, shall prior to purchase have the system inspected by a person certified by the department except that if it is impossible due to weather conditions to perform an inspection of the system prior to the purchase, the inspection must be performed within 9 months after transfer of the property. If the inspection finds that the system is malfunctioning, the system must be repaired or replaced within one year after transfer of the property. For purposes of this paragraph only, indications of a malfunctioning system are limited to the indications specified in the definition of "malfunctioning system" in the department's rules regulating subsurface waste water disposal that are in effect on the effective date of this paragraph. [2007, c. 568, §2 (NEW).]

- **B**. A subsurface waste water disposal system that has been installed pursuant to section 4211 and rules adopted under Title 22, section 42 within 3 years prior to the closing date of the transfer of property is not subject to the inspection requirements of paragraph A. [2007, c. 568, §2 (NEW).]
- C. If the seller of the shoreland property has a written inspection report for an inspection of the subsurface waste water disposal system that was performed within 3 years prior to the date of the transfer of property by a person certified by the department, then the seller shall provide the inspection results to the purchaser, and the purchaser is not required to have the system inspected pursuant to paragraph A. [2007, c. 568, §2 (NEW).]
- D. The inspection described in paragraph A is not required if the purchaser certifies to the local plumbing inspector that the purchaser will replace the subsurface waste water disposal system within one year of the transfer of property.

The question, re insulation R values:

I was wondering what a realistic depth in under roof spray in insulation is for the 49 R value required in my area. I know that closed cell foam spray in insulation typically has a 6.5 to 7 R value per inch, but I have been trying to research the comparison between typical insulation and closed cell foam spray in insulation. I figure there are some of you that have a good deal of experience with this, and can provide some more information on the actual R value of spray in closed cell foam insulation when the total effect of the air sealing is considered as well.



The answer (from a well respected long time insulation contractor):

Saying closed cell is R-7 per inch is like saying a 2x4 is 2^nI consider 3^n of CCSF to be R-20. For R-50 I use $7 \frac{1}{2}$ Also the code calls for R-49 but if you can get the full R-value all the way to the outside of the wall plate you can drop to R-38. In that case R-40 would be 6^n CCSF. Hope this helps!

The question, re tiny home foundations:

I have a copy of Appendix V Tiny Houses but it does not address foundations. Can any tell me where to look or what is required?

An answer:

In Augusta we require a frost protected foundation, whether that is an insulated haunch, frostwall, full basement, helical posts, concrete piers, etc. The tiny house appendix V provides some reduced standards (or should I say provides for new unique dimensional standards specific to tiny homes) but the rest of the 2015 IRC still applies (including frost protection requirements).



Another answer:

The foundation has to meet the specs in Chapter 4 of the IRC, just like any other house. If it's a manufactured tiny house on a metal trailer frame, I'd want an engineer's stamp on placing that on an IRC foundation, since the frame likely isn't designed for that.

The question, re private fuel dispensing:

My question to the group is ... Do private companies that refuel their equipment/ vehicles on site from a bulk holding tank (500 gallons) need to have a permit from the State and be inspected annually by the State? Thanks in advance for your assistance.



The answer, from the State Fire Marshal's office:

Good Morning all.

In hopes of clarification from the FMO on the fuel dispensing topic and the conversations, Steve Dixon from our office has offered his comments to me to forward to you all:

Underground storage is regulated by DEP. We have deleted requirements for underground storage from NFPA 30 so we will not be conflicting with DEPs requirements. They do enforce a lot of the NFPA 30 requirements for underground storage.

DEP requires permits and registration of underground facilities.

DEP Siting rules apply to both underground and aboveground facilities. I deal with Laura Donovan. Donovan, Laura J < <u>Laura.J.Donovan@maine.gov</u>>

All work on an underground storage facility is required to be done by a Certified Tank Installer certified by DEP Board of Underground Tank Installers. Theresa Scott at DEP is their secretary. She can give you more information if you need it.

BUSTU certified tank installers do a lot of my aboveground storage tank installations.

Butch Bowie at DEP is involved with inspecting retail fuel dispensing facilities. Bowie, Butch C < Butch.C.Bowie@maine.gov>

To my knowledge, most municipalities do not get involved with permitting flammable/combustible liquid facilities.

Anyone should contact me with questions about aboveground storage. <u>Stephen.W.Dixon@maine.gov</u>

An aboveground storage tank is a permanent tank 60 gallons or greater capacity.

Permits are required from the Fire Marshal's office. The link to permits is included in an earlier post in this conversation. This does not include fuel for systems connected to oil burners that are regulated by the Maine Fuel Board under NFPA 31 and the board rules. The permit requirement does apply if they are supplying an engine or dispenser as well as the oil burner.

Permits are not required for "Gen-Sets" where the tank is an integral part of the listed generator, but the gen-set must be installed according to the listing and manufacturer's requirements.

The Fire Marshal's Office does not require a permit for a tank that will be on site no more than 180 days (construction site, wood cutting operation, etc.). A "temporary tank" MUST meet all code requirements. Fuel Dispensing is regulated under NFPA 30-A and NFPA 30.

Storage and dispensing rules apply to all flammable and combustible liquids; when the Safety Data Sheet includes a flash point, the product is covered.

Requirements are modified in the code and standard for certain products based on their flash points and classification. E.g., Class 1 A liquids such as 100 proof ethanol and racing gasoline need a normally closed vent device and a flame arrester in their normal vent, Class IIIB liquids such as motor oils may not need secondary containment.

We have facilities classed as public fueling (retail sales) and private/fleet fueling as farmer's tanks described by Mr. Paul. The farmer's skid tank does require a permit.

Watch for the individual who buys a 275 gallon tank at the big-box and uses it for gasoline. Most of the tanks sold by big box stores are UL-80 tanks listed for combustible liquids (heating fuels), not flammable liquids (gasolines). There are 275 gallon tanks with a UL-142 listing that includes gasoline storage. These have an extra bung for an emergency vent device. Look at the tank label. NFPA 30-A does allow fueling equipment in remote locations from a tank vehicle.

The Fire Marshal's Office does not require annual inspections.

Skid tanks at farm are considered private fueling facilities and do require a permit.

Maine Electrician's Examining Board and municipal electrical inspectors have jurisdiction over electrical service at flammable/combustible liquid facilities;. NFPA 30 and NFPA 30-A require electrical wiring in compliance with NFPA 70, National Electrical Code.

General:

A tank designed and manufactured to be an underground tank cannot be used as an aboveground tank. Tank owners like to sell the underground tank DEP made them remove to someone who wants an aboveground tank. Conversely, a tank designed and manufactured as an aboveground tank cannot be used as an underground tank.

Tank vehicles/trailers should be regulated under Federal DOT 49 CFR or NFPA 385. No permit is required from the Fire Marshal's Office.

A tank designed and manufactured to be an aboveground storage tank <u>cannot be used as a transport</u> <u>vehicle/trailer tank!</u>

Other codes apply for tanks for stationary engines for fire pumps and generators.

The Ground and Surface Waters Clean-up fund has been established to help tank owners to pay for clean-up of oil spills at their facility. The fund has a "Standard Deductible" based on the total storage capacity the owner owns that determines how much the owner must pay. There are also "Conditional Deductibles that may be applied to what the owner must pay. The conditional deductible for not having a required permit is \$5000. The cost of the permit is \$15.

Steve's contact information is as follows, feel free to contact him directly with any questions you may have. He is a wealth of knowledge on the subject:

Stephen W. Dixon, Sr.

Inspector II
Office of the State Fire Marshal
52 State House Station
Augusta, ME 04333-0052
207 626-3890
http://www.maine.gov/dps/fmo/index.htm

Diplomacy is the art of saying "Nice doggie" until you can find a rock.
- Will Rogers

Marc A. Veilleux
Public Safety Inspector III, CFI-I, CFPE
Plans Review Supervisor
Maine State Fire Marshals Office
45 Commerce Drive
Augusta, Maine 04333-0165
Office # 207-626-3880
Direct ext. # 207-626-3991

Cell # 207-592-0757
Fax #207 287-6251

Marc.Veilleux@maine.gov http://www.maine.gov/dps/fmo/index.htm

The question, re glazing in a stairwell:

Can anybody offer suggestions with covering a non-compliant window in a stairway? The window is located along winders, and the window is not tempered glass. The owners are closing on a sale in a couple weeks. Can a guard 36" in height go across the window? Is there protective film they can purchase? Thank you in advance on any helpful suggestions.



Thank you Marc and

Steve! WOW!

You guys are one stop

tank rules shopping!

An answer:

If you're a MUBEC town, see IRC R308.4.6 exception 1. It allows a railing to be placed in front of the glass to negate the need for safety glass. The code in effect when the building was built, if there was one, might hold some answers. If you didn't have a building code when the window was installed, the thing may be OK/legal as is, unless a referenced code through NFPA 101 or other State code at the time required safety glass. I'm not aware of any add on products that make non safety glass into safety glass. Maybe others are and will chime in.

In Memorial:

The codes community suffered a large loss in October, with the passing of Harpswell Codes Officer Fred Cantu. Fred was a great guy. He came to codes enforcement after a career in The Navy, and a stint running Harpswell's transfer station. He was bright, and affable, and always had a smile on his face. He had a great way with people. He could tell you you had to cut the deck off your house because you built it too close to the water, without a permit, and as he was leaving, you'd likely shake his hand and thank him for coming by. He was a proud veteran, an avid fisherman, hunter, family man, and a very good sax player. If you attended either of the last two codes conferences, you likely saw him playing with The Codesdogs, the MBOIA rock band. Fred will be missed by many, and we send our condolences to his family and friends.



From the "Protect Me From Myself" file: When

responding to an email, delete the recipient from the "to" box, and then put them back in there after you have composed your email. That way an errant keystroke can't launch an incomplete email and make you look like an idiot.



State Fire Marshal's

2019 CHRISTMAS TREE POLICY

The Office of State Fire Marshal wishes everyone a safe and festive Holiday Season. Toward this end, the following policy has been developed for the use of Christmas Trees in public buildings.

Some communities throughout Maine have regulations that may be more stringent than this policy. In these municipalities, the Fire Chief or Codes Enforcement Official will set the standards for the use of natural greens and trees.

In communities that have no local standards, the display of greens or trees in occupancies such as mercantile, assembly, education, and business or like facilities must be done in one of four ways:



By HikingArtist

- *A living tree, with its roots protected by a ball of earth and wrapped in burlap or similar material placed in a sturdy container and watered daily.
- *An artificial tree, labeled or certified by the manufacturer as flame retardant or flame resistive.
- *A natural cut tree located in an area protected by an approved automatic sprinkler system.
- *A natural cut tree, sprayed or dipped by a commercial applicator using a tested and listed fire retardant formula.

Local officials should familiarize themselves with the authorized commercial applicators in their respective geographic areas. Each treated tree shall have a certificate attached, stating the name of the formula, name of the applicator, and date of treatment. Treated trees must be watered daily. Natural living, balled or cut trees and greens, treated or untreated, will continue to be banned in patient care facilities.

- **AND** - From the Did You Know file:

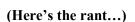
All new hood and duct systems require a permit from the State Fire Marshal's Office, whether the whole building project requires a permit from them or not.



THE FUN PAGE (with a short rant)



Taken at the Topsham Public Library, at a Subsurface Wastewater Disposal Code seminar. Come on Chewey- use the bathroom....



So the top of the pipe is 24" below the ERP? Are you @!%tting me? Come on Site Evaluators. Place the ERP so that we can check it standing up like a human being, without having to lie in the dirt or set an offset. This isn't the way to make us like you.....



Safety first. At least he's wearing his hard hat



The plug just broke off. What was I supposed to do?

CONSTRUCTION ELEVATIONS
Finished Grade Elevation
Top of Distribution Pipe or Proprietary Device
Bottom of Disposal Area

ELEVATION REFERENCE POINT
Location & Description: NAIL FLAGGED
PINK NO 2" MAPLE
Reference Elevation:

0.0"

WE'RE GOING BACK TO SEBASCO FOR THE 2020 CODES CONFERENCE!

This year's MBOIA codes conference will be at Sebasco Harbor Resort, in Phippsburg, on May 18th and 19th. We held the conference there for a number of years, and are going back since Point Lookout closed. (I hope it wasn't something we said...). 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.



And keep the Renovation, Repair, and Painting requirements in mind...

EPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified by EPA (or an EPA authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices. The Maine DEP website and the EPA website have all the information that people need to know the requirements. Lead paint is dangerous, and New England, being the oldest part of the country, has a lot of it. We all come in contact with people renovating old houses all the time. Help them play safe. If you want some handouts to give out about this, contact the DEP or the EPA. They're glad to help make people aware of the hazards and rules.

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, the NFPA codes, and the Plumbing Code on line, for free! This is a great tool for contractors, design professionals, and codes officials. You can access the NFPA codes at www.nfpa.org. You can see the I-codes at www.iccsafe.org. The Plumbing Code is at www.aipmo.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 207-443-8334



www.cityofbath.com