

# THE ENFORCER

**NEWSLETTER OF THE MAINE BUILDING OFFICIALS  
AND INSPECTORS ASSOCIATION.**

**BY CODES ENFORCEMENT PROFESSIONALS.  
FOR CODES ENFORCEMENT PROFESSIONALS**

**January  
2015**



## **MUBEC AMENDMENTS BACK ON TRACK !**

Praise the Lord and pass the permits.

After some fits and starts and detours and derailments, the MUBEC amendments are back on track. Per Rich McCarthy, they were signed by the Commission (of Public Safety) in December, and barring comments that generate a public hearing, they'll become law some time in January. A copy of the entire text is available on the MBOIA website. Summarizing the changes:

The applicable texts are modified to recognize/include the MUBC (just the building codes of the MUBEC), and the MUEC (just the energy code of the MUBEC), that towns under 4000 population can adopt if they choose to.

The sprinkler requirement for Live-Work Units is removed.

IBC 903.2.1.2 was amended to raise the sprinkler threshold for A-2 occupancies from 100 occupants to 300 occupants.

The IBC was amended to allow sprinkler systems other than NFPA systems, approved by the State Fire Marshal's Office, to be used.

Business occupancies were deleted from Table 1018.1/corridor fire rating requirements.

IBC 1029.5.1 was amended to require that Emergency Escape and Rescue Openings (EEROs) be maintained free of obstructions and available for use at all times.

The IRC (302.12) was amended to require additional draftstopping in combustible concealed spaces in unsprinklered buildings.

### **Inside**

Alternative Houses	4
Abandoned Properties	5
Stamped Plans	9
ICC Interps	11
Moosechat	12
Fire Marshal Permits	16
Didjoo Know?	19
Good Stuff - Throughout!	

The IRC (310.2) was amended to require that windowwells serving EEROs be kept useable at all times (shoveled out).

These amendments have been a long time coming.  
The goal line may be near.....



## WELCOME!

to the 2014 edition of The Enforcer. This newsletter exists for the purpose of getting useful information out to people who can use it. State laws, certification stuff, code interps, tips and tricks, advice from the old dogs - it's all here - for you! Whether you're a codes greenhorn or a codeasaurus, you'll find something useful in these pages. 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. Many thanks to the State inspectors who answer my questions, some of which are quoted in this newsletter, (with or without credit). This newsletter will be posted on the MBOIA website, where you can print it in color (which is way better than the black and white one you may be reading.) So put down the condemnation notices, administrative warrants, and stop work orders, take off the bulletproof vest, and enjoy the ride.

Scott Davis Editor, Publisher, Janitor, Chiefcook&bottlewasher, Whatever.....

## STATE STOPS INSPECTING CARNIVAL RIDES? (Huh?)

While the how and why details are sketchy, the authority for the State Fire Marshal's Office to inspect carnival rides reportedly has been removed. Previously, the SFM inspectors inspected all carnival rides used in Maine. Reportedly the Maine Municipal Association is working on fixing this. (Inquiries to MMA about this were unreturned by press time.) If this doesn't get fixed, give thought to what, if anything, your town might do to patch this hole in the public safety net. It's potentially a big one.

CEO Fact of Life #8: It is statistically impossible that you will find out about state or federal laws that affect you sooner than six months after they take effect. Know also that six months is an optimistic estimate.



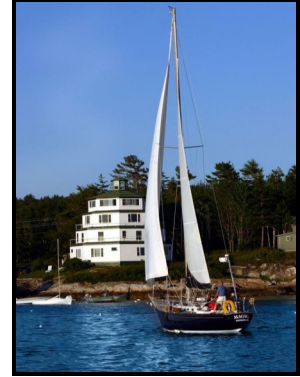
## Where Can I See Them Codes?

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 ([nfpa.org](http://nfpa.org)). You can see the I-codes on line, here: [www.publiccodes.cyberregs.com](http://www.publiccodes.cyberregs.com). This is on the ICC website, which is [www.iccsafe.org](http://www.iccsafe.org). You can't print or copy all of these, 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!



## 2014 MBOIA Codes Conference Another Home Run

From the Broken Record Department - the 2014 conference, at Sebasco Estates, in May, was another good 'un. Good topics, good speakers, a nice venue, interesting vendors, great administrative support from MMA, and exceptional organization and management by our officers and directors. Two days of great education and networking at a very affordable price, without having to leave The Great State of Maine. A big thank you to Mark Stambaugh and his minions, and all who participated for another job well done.



### AND ALSO FROM THE TRAINING FILE

If you didn't attend the IRC and IBC training put on in early December, by our Association, using our freebie training session that comes with our ICC membership, that had a fantastic ICC instructor that Paul Demers sniffed out at an ICC gathering, and got here, rig a machine to kick yourself in the butt every morning. By all accounts (yeah- I missed it) it was excellent. The IBC and IRC are the backbone of the MUBEC, and most of us learn something new every time we attend a class on 'em. Thanks again to our leadership for a providing a great training opportunity.



Photos by Bill Longley

### Florian Hall Faux Pas!!!! (Don't do as I do.....)

After hearing the ICC instructor point out that one of the exit doors at Florian Hall at the Public Safety building in Augusta actually wasn't a bona fide, code complying exit, The Twin Towers of Codes Powers, Rich McCarthy and Paul Demers, leapt into action to rectify the situation, with a ladder and a roll of tape. And people say nothing gets done in Augusta.....

### Codes Enforcement Fact of Life # 5

If every contractor who told you the work you rejected would have passed code in another town was telling the truth, the entire world would have fallen down or caught fire by now.





Work is underway to adopt the 2015 I Codes. A committee has been formed to review the new versions of the codes, and propose amendments that will make the codes serve our Maine needs and blend with the other codes in effect. Rich McCarthy expects the review process to be complete by mid to late 2015. There will be a process and/or opportunities to participate in the review and offer input. MBOIA leadership will keep us abreast of developments.

## ALTERNATIVE HOUSES

### Possibly Coming Soon To A Jurisdiction Near You (maybe yours....)

Tiny houses, houses made from shipping containers, yurts, and other types of unconventional houses are going up around the country, and one may soon cross your desk for a permit. Think about how you'll handle it.



Does your zoning allow it? If you're a MUBEC or MUBC town, does your building code allow it? Ship's ladders to sleeping lofts, composting toilets, dinettes that turn into a guest bed, RV type plumbing. Questions, questions, questions.....



Some of the tiny houses are stick built on site, some are built on a trailer frame in factories, built to an ANSI standard that applies to recreational vehicles (does that make them manufactured housing?) Some of these alternative houses look like they were built by hippie



hillbillies, others are designed by architects and will be the priciest house on the street. Consider what you'll be looking for in the way of code compliance. Stick built ones are easy. They have to meet MUBEC/MUBC if that code is in effect in your town (IRC R101.2), and NFPA 101, and applicable mechanical codes, in effect state-wide.

The ones on trailers are a little stickier. Can they be used as a dwelling? Will they withstand the snow load, the wind load? Are they built to the IECC? You're the one who has to sign the permit, or not.

Get ready.....



### Earthships

If you're into green, sustainable, earth friendly housing, check out earthships at [www.earthship.com](http://www.earthship.com). They incorporate lots of cool, innovative building science.



## POOLS AT ABANDONED PROPERTIES = PROBLEMS

Along with shaggy lawns, trash left around, and mold taking over a house with the heating plant and sump pump shut off, some abandoned properties going through foreclosure present a serious public safety hazard— pools. Even with proper fencing, a pool full of water at an abandoned property is a safety and health hazard, providing an attractive nuisance to curious children, and a mosquito breeding factory. Kids are drowning in abandoned pools around the country, and codes officers around the country are spending a lot of time and money causing abandoned pools to be drained and/or provided

with safety covers (covers that are designed to support people). If you're a MUBEC town, section 115 of the IEBC can be a good tool to order the pool to be drained or otherwise secured. If the property is being foreclosed, it may be a long time before someone steps up the plate and handles the problem. If you're a "gitter dun" type, you can drain an aboveground pool pretty easily with a 1.25" flex hose weighted at one end. Just set up a simple siphon, hang the unweighted end over the wall to ground,





The Binford 2000 pool drainer.  
The deluxe model has a checkvalve on the bottom end.

and let 'er rip. It takes about 9 hours to drain a 4' x 16' diameter aboveground pool. Inground pools are harder, since you need a pump and a power source. Some municipalities are using their fire departments to drain abandoned pools. They've got pumps and hoses, and loooooove playing with water. Be careful where you discharge the water. You don't want to solve a problem at one property and create one at another. That's not good government. Preventing some kid from drowning in an abandoned pool is.

"Good judgment comes from experience, and a lot of that comes from bad judgment."  
Will Rogers

May the  
code  
be with  
you.



## And Speaking of Abandoned Properties....

Getting problems solved at properties going through foreclosure can be a real headache. The owner has abandoned the property, but the foreclosure action has not been adjudicated by the court. The owner says that the bank is responsible, but the bank says that they are not the owner yet (and they're right). Below is the timeline for a foreclosure action.:

- Owner A executes a mortgage to the Bank.
- Owner A doesn't pay the Mortgage so the Bank files a COMPLAINT with either District or Superior Court. The Court issues a CLERK'S CERTIFICATE. Either the Complaint or the Clerk's Certificate must be recorded at the Registry of Deeds. This opens the foreclosure case. **The property is still owned by Owner A.**
- The Bank sends a summons to Owner A and any other lien holders notifying everyone that a foreclosure action has been filed. The Bank files for a summary judgment from the court. The court issues a JUDGEMENT, which is almost always recorded. **Owner A still owns the property.**
- Owner A has 90 days (from the date that the Judgment is entered into the docket, not the date of the Judgment) to redeem the Mortgage so nothing happens until this redemption period expires. **During this 90 day redemption period, Owner A still owns the property.**
- After the 90 day redemption period, The Bank has another 90 day window in which they must publish a foreclosure auction notice in a local newspaper (for 3 consecutive weeks). **Owner A still owns the property.**
- The date the public auction must be held is between 30 to 45 days after the first publication in the newspaper. The highest bidder gets a deed from The Bank. (If The Bank is the high bidder, they execute a deed to themselves.) *Beware that the foreclosure deed to the highest bidder is often not recorded for months after the auction.* **The Highest bidder becomes the owner upon recording of the deed transferring the property from The Bank to the highest bidder.**
- Sometimes Owner A will execute a deed in lieu of foreclosure transferring the property to the bank, to avoid the foreclosure process. Upon recording the deed, **the bank then becomes the owner of the property.**

As you can see, throughout the foreclosure process, the property owner owns the property, and is responsible for it, whether they want to or not. You might be wise to copy the lending institution on your directives to the owner to solve codes problems there, since they do have a legal interest in the property. Some of them hire property maintenance companies to care for the property while it's going through foreclosure, and are responsive to the problems needing correction. Also, don't assume that the lending institution will end up with the property. Sometimes they decide they don't want it, and dismiss the foreclosure suit, leaving the property in the hands of the owner/mortgagee.

If there are health and/or safety problems at the site that can't wait to be resolved, and the town resolves them at the owner's expense, as detailed in MRSA 22 sec 1561, you'd be wise to prosecute the violations and get reimbursed, or get a lien on the property promptly, since it may be changing hands. If that happens, having notified the bank all along is a big plus.

You can track the foreclosure's progress in the court system two ways. The **Registry of Deeds** will have some of the foreclosure documents on file, and many of the registries are available online. Search for the mortgagee/grantor's name (the person who your assessing records show as the owner of the property), and that will lead you to foreclosure documents, which will give you the name of the lending institution. Sometimes you'll get their address. Other times you'll get the name of the Maine law firm handling the foreclosure for the lending institution. Either way, it's one end of the ball of string. The other resource is **the court in which the foreclosure is being adjudicated**. You can call the Clerk of the Court and find out the status of the case. Having the docket number, which you can sometimes get from the Registry documents, is a big help with getting info from the court.




---

## Sometimes The Bank Can Be Your Friend

Sometimes banks want to solve codes problems at properties being foreclosed, to protect their investment, and sometimes, not so much. Some hire property management firms to manage abandoned properties going through foreclosure. They change the locks, drain the pipes, etc.. Finding out who the management firm is can be challenging, but Steve Wilson, Camden's CEO, graciously provided a list of property management companies used by various banks, with contact information, and a document introducing a service by the National Association of Mortgage Field Services where codes enforcement people can connect with the folks they need to solve problems at properties being foreclosed, in a recent Moosechat exchange. That info is posted on the MBOIA website ([www.mboia.org](http://www.mboia.org)). Thank you Steve! Information is power. Grab all you can!

---

## You've heard of spite fences.....

**From the Salt Lake Tribune, in 2006:** A city councilman in Riverton, Utah, Mark Easton, had a beautiful view of the east mountains, until a new neighbor purchased the lot below his house and started building a new home. The Eastons and another neighbor complained to the city about the soils the house would sit on. The city required the owner to provide a new soils report and delay his project. Once the house was framed, it was 18 inches higher than the ordinances allowed, so Mr. Easton again complained to the city, and the city had the neighbor drop the roof line, at great expense. Later during construction of the house, Mr. Easton called the city to complain about some vents that the new neighbor had installed in his house (those Mormons have a sense of humor) →

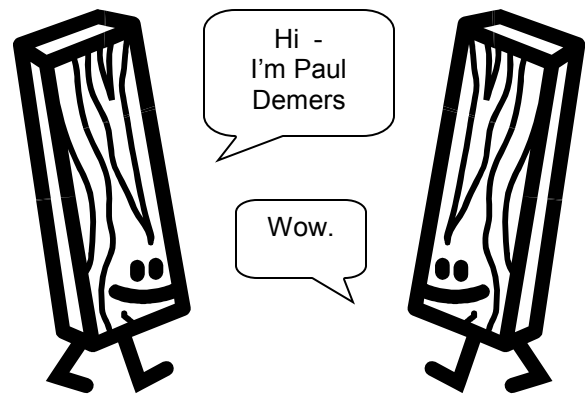






## BOARD MEETINGS

Our MBOIA elected officials had a busy year doing the Association's business. Tracking legislation, participating in regional codes congregations, putting on the conference, booking speakers for our meetings, representing us at the International Codes Council, paying the bills, approving new members - there's a lot to running the Association, and they do it well. Many thanks to those who serve us.



## MARK YOUR 2015 CALENDARS FOR:

Thursday, January 22nd	9 AM	Merry Manor	South Portland	Annual Membership Meeting
Thursday, February 12th	9 AM	MMA	Augusta	Board of Directors Meeting
Thursday, March 19th	9 AM	Fireside Inn	Portland	Membership meeting
Thursday, April 23rd	9 AM	MMA	Augusta	Board of Directors Meeting
Mon & Tues May 18th/19th		Sebasco Resort	Phippsburg	Annual MBOIA Conference
Wednesday, June 24th	9 AM	MMA	Augusta	Board of Directors meeting
Thursday, July 23rd	9 AM	Spring Meadows GC	Gray	Membership meeting
Thursday, October 15th	9 AM	MMA	Augusta	Board of Directors meeting
Week of November 2nd	3 days of co-	sponsored training	details TBA	
Thursday, December 19th	9 AM	Green Ladle	Lewiston	Annual Membership meeting

“Ask not what your association can do for you. Ask what you can do for your association.” Paul “John Kennedy” Demers

“It takes a lifetime to build a good reputation, but you can lose it in a minute.”  
Will Rogers



# STAMPED PLANS

You can't get 'em at the Post Office.....



There are two kinds of codes officers. Those that at some time or another have wondered if a plan or specification has to be stamped by an architect or engineer and those that are going to.

You can be prepared for the first or next time you'll be wondering by knowing the info below, from the licensing laws and rules from The Architects, Engineers, and Landscape Architects Board.

## Engineers

### **State Board of Licensure for Professional Engineers Rules Chapter 2 Section 9 paragraph 5.**

5. A seal shall be applied, signed and dated, including hardcopy or electronic versions, in the following cases:

- A. On all professional engineering plans, specifications, reports, or calculations prepared by or under the direction of the responsible licensed Professional Engineer;
- B. On all professional engineering plans, specifications, reports or calculations formally filed or offered for filing with any public body or agency; and
- C. On all professional engineering plans, specifications, reports or calculations formally submitted to contractors for bids or estimates, or when released for construction

6. A seal need not be applied in the following cases:

- A. On any professional engineering plans, specifications, reports or calculations which are prepared and clearly identified as "PRELIMINARY," "PROGRESS," or the like;
- B. On individual specification sections which are part of an integrated document assembled and sealed by another licensed engineer or licensed architect;
- C. On electronic files (such as CAD files) submitted as a deliverable to a client, IF the Licensee affixes a statement specifying the original date of issue and sealing, such as the following: "This document was originally issued and sealed by (Licensee Name, PE License #), on (Date of original sealing)"; or
- D. On administrative correspondence.

### **More exceptions:**

### **MRSA 32 Chapter 19 paragraph 1255**

**8. Persons engaged in design of minor construction.** Persons engaged in the design of the following minor construction do not need to provide stamped and sealed plans and specifications unless specifically required by the code enforcement officer.

- A. Detached one-family or 2-family residences;
- B. Farm buildings with an overall floor plan not exceeding 3,000 square feet;
- C. Single bathroom additions or renovations in an existing building if there is no impact on the building's compliance with the National Fire Protection Association Life Safety Code adopted by the Department of Public Safety, Office of the State Fire Marshal;
- D. Revisions or additions to plumbing systems costing up to \$10,000 if the work has no impact on the building's compliance with the National Fire Protection Association Life Safety Code adopted by the Department of Public Safety, Office of the State Fire Marshal and does not involve roof drains;

- E. Revisions to existing heating, ventilation and air conditioning systems and design of new heating, ventilation and air conditioning systems if the work has no impact on the building's compliance with the National Fire Protection Association Life Safety Code adopted by the Department of Public Safety, Office of the State Fire Marshal requirements and the project does not include more than one heating, ventilation and air conditioning unit with a maximum cooling capacity of 5 tons or heating capacity of 200,000 BTUs;
  - F. Revisions or additions to structural systems costing up to \$10,000 if the design is in accordance with the tables provided in the International Building Code; and
  - G. Revisions or additions to electrical systems costing up to \$10,000 if the work has no impact on the building's compliance with the National Fire Protection Association Life Safety Code adopted by the Department of Public Safety, Office of the State Fire Marshal.
- All the work that is done under these exemptions must be in accordance with the licensing requirements of the trade involved, including, but not limited to, all construction industry design standards such as the National Fire Protection Association standards, state and municipal building and energy codes, the State Fire Marshal's requirements and ASHRAE Standard 62 and ASHRAE Standard 90.

## **Architects**

**MRSA 32 sec 225. Seal** Each licensed architect or landscape architect shall upon licensure obtain a seal of such design as the board authorizes and directs. Technical submissions prepared by or under the direct supervision of a licensed architect or under the direct supervision of a licensed landscape architect must be stamped with the seal during the life of the licensee's license.

### **Except:**

..

**2. Technical submissions; construction or development.** Nothing in this chapter may be construed to prevent any person from preparing technical submissions for, or administering construction contracts in, the erection, construction or development of:

- A. Detached single or 2-family dwellings, including those to be utilized for home occupations, as defined by local ordinances, and sheds, storage buildings and garages incidental to the dwellings;
- B. Farm buildings, including barns, silos, sheds or housing for farm equipment and machinery, livestock, poultry or storage, if the structures are designed to be occupied by no more than 10 persons;
- C. Alterations, renovations or remodeling of a building when the cost of the work contemplated by the design does not exceed 15% of the assessed value of the building or \$50,000, whichever is the lesser, or does not require the issuance of a permit under applicable building codes or when the work involves those structures as provided in paragraphs A, B, F, G and H or when the work involves interior design services performed by a certified interior designer;
- F. Buildings that do not have as their principal purpose human occupancy or habitation; ]
- G. Single-story, above-grade buildings of less than 1,000 square feet that are designed to be occupied by no more than 10 persons;
- H. Preengineered manufactured buildings. For the purposes of this section, "preengineered manufactured building" means a structural unit, other than a dwelling, that is designed by a person licensed as an engineer in the State and is constructed in a manufacturing facility.

I hope that helps. You can see all of the architects and engineers rules on their Board websites at [www.maine.gov](http://www.maine.gov).

## ICC INTERPS

As you likely know, if you're an ICC member, you can ask them for code interpretations. They provide answers to code questions, both by staffers, and by a formal board. Thanks to those asking the questions, and to ICC for the answers.



**The Question:** We live in a snow region with a 60 psf GSL. I have a home owner who would like to construct a 2,700 square foot single story greenhouse as an accessory building for his own use. I do not have much detail but it sounded like construction will be metal or wood hoops covered by some form of tensioned polyethylene (type that comes in a roll) and for the most part homemade - at best a cheap kit, both to keep cost down.

Permitting would fall under the IRC, however my understanding is that when structural elements of a building or structure are beyond the prescriptive scope of the IRC, Sections R301.1.1 and R301.1.3 allow for an engineered design of these elements in accordance with the IBC. The two codes are used in conjunction with each other for the project with the IRC intent (Section R101.3) still applicable to the use of the building covering egress, interior environment, life safety, etc.; to me this implies this building will require engineering for the load supporting structure.

My question is this: Is there an IRC code provision or accepted other-than-code practice that would exempt these or similar types of structures as a "Building" as defined and therefore not subject to the code? I do see that the same building I described built for a commercial use under the IBC would be regulated by Section 3102. In reading through Section 3102.1, certain membrane structures that are not used for human occupancy need only meet two code sections (one being structural). Maybe "not used for human occupancy" could be applicable to a structure not being defined as a building in the IRC?

**ICC's answer:** We understand your situation involves a proposed one-story 2,700 square foot greenhouse that will be located on the same lot as a single-family residence and will serve as one of its accessory structures. The greenhouse will be field constructed or built as a kit and will be a hoop-framed structure covered with a tensioned polyethylene membrane. The ground snow load for this location is 60 psf. You are specifically asking whether this structure must be "designed" to demonstrate that it can withstand the snow loads, wind loads, etc. The answer is Yes.



Sections R105.1 and R105.2 require a building construction permit for most accessory structures. Although these structures might not be considered as being "habitable" or "occupiable", they must still be constructed to safely support all loads. These code provisions are intended to ensure the life safety of the homeowner and his guests when they are within the greenhouse and to lessen property damage during normal snow events. Since this structure is not of conventional wood-framed construction, then Section R301.1.3 does indeed require an "engineered design". You are correct in that a membrane-covered frame structure in the IBC must comply with Sections 3102.1, 3102.3.1 and 3102.7. Clearly, Section 3102.7 still requires an engineered design, even for a plastic-covered greenhouse that is part of a residence. Someone must be able to show that this greenhouse is properly braced to withstand the applicable wind loads and your 60 psf ground snow load. The details and arrangement of this greenhouse must be reviewed and approved by the local building official as part of the building construction permit process.

Gary Nelson P.E.  
ICC Staff Engineer



**The question:** My area in Maine has a ground snow of 60psf, wind design of 100mph and seismic design category B. R502.2.2 requires a deck to be designed for both vertical and lateral loads as applicable. Commentary to R502.2.2.3 states the code-prescribed loads are dead, live, wind and seismic. This would mean the code prescribed lateral loads are wind and seismic. The section goes on to state "the magnitude of the lateral loads to be resisted is not specified and must be determined in accordance with accepted engineering practice"



Although wind and seismic forces are low in my area, they do exist (albeit insignificant relative to several other code sections) but are still presumed to generate some level of lateral force. Because of this, is lateral load design or tension devices per R502.2.2.3 required in order to meet the lateral load requirement of R502.2.2.?

**ICC's Answer:** Yes. Engineered lateral load connections are required but the prescriptive lateral load connection in Figure R502.2.2.3 is permitted. The required number and actual design of the connection to resist the lateral loads must be determined in accordance with accepted engineering practice. Where Figure R502.2.2.3 is used, a minimum of two hold-down devices, with a design capacity of 1,500 pounds (6672 N) each, are required. Where Figure R502.2.2.3 is not used then the quantity and load capacity must comply with the engineered design.

**The Question:** Code prescribed lateral loads appear to be limited to wind and seismic. Occupants can generate significant lateral loads by moving around. I understand a good design may anticipate the moving occupants but do the deck provisions of the IRC code require a design to scope dynamic occupant loading in addition to static?

**ICC's answer:** The IRC does not require consideration of lateral load due to occupant movement. This may be considered based upon engineering judgment by the design engineer.

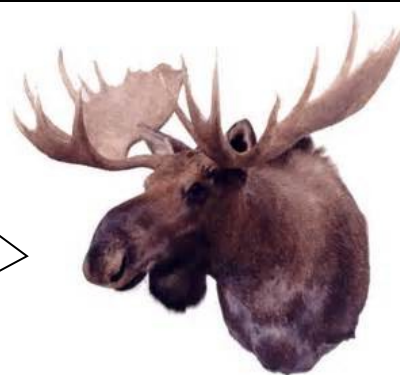
Larry Franks, P.E. CBO  
ICC Senior Staff Engineer

And now, on a more local level.....

## **Moosechat**

Lots of good Moosechatter bouncing around 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). 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. Some of the responses are from State inspectors, and I've credited 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 of the responses contain text that's just too funny and/or fantastic not to credit to the authors. Thanks to those asking and answering the questions. This is a great, educational forum

I'm glad I'm  
not a  
codes officer.



### The Question:

Hi people,

I've been getting lots of calls lately from lenders wanting copies of Certificates of Occupancy. We've had a building code for many years that required a CO be issued, but for whatever reason, e.g. they weren't doing it or the record keeping is just not good, many files don't have one. Most lenders don't really press the issue when I tell them there is no such record, but I have one that is insisting. I don't know how comfortable I am doing that considering it's not entirely clear that inspections were even conducted or to what code the building was constructed (and there likely also are no plans in the file, just the permit application form). So first question is, how do you handle a situation like this, would you issue COs years after the building has been completed and occupied?

Second question has more to do with the particulars of one building where the lender is looking for "an updated certificate of occupancy to evidence property is currently a legal single family residence". A 2 bedroom single family dwelling was permitted in 1993. In 2002 an addition was permitted and the permit application described the project as "enclosed breezeway with an attached 2 car garage. Second floor or the garage will have a bedroom and bath." There are no plans in the file for this addition. No COs in the file for either permit. Currently the property is assessed as a 2-family dwelling. I visited the property a couple of months ago and it had a kitchen above the garage but the stove had been removed so that it did not meet our definition of a dwelling unit. A 2-family dwelling does comply with our zoning requirements, so that's not in play (we don't have standards that allow for in-law or accessory apartments). The assessor tells me he's not willing to change the tax card since it's too easy for someone to just put the stove back. Apparently the property owner can only get financing as a single family dwelling. While it's not clear from the permits that this was originally intended to be a two-family dwelling, that's what was constructed. And if it looks like a duck.... Thoughts on how you'd handle this one? I'd already written them a letter explaining the facts of the case, but if they press it I think I could just have the home owner submit a permit application for a change of use, then it's his request not the lender's, and a CO can be issued for that.

Who-me?



Thanks for your input!

**An answer:** I would not issue an after-the-fact CO as you don't know if the building met code when it was built. It is very common that CO's were not issued in many jurisdictions in years past and if that is the case, then a letter to that effect (essentially a no action letter) is all that you can provide to the lender. If CO's were issued on a consistent basis and a given property was not inspected and a CO was not issued you could

indicated that you would accept a third party inspection by a qualified person and if such individual is willing to state that it is his or her finding that the property met the codes that were in effect at the time it was constructed, you could issue a no action letter.

"It's quacking like a big duck:"

Jon Reed  
Scarborough CEO

The "two family dwelling" was illegally established and it appears that the owner has simply removed the cook stove and wants you to determine that it is a single family home. I concur with your assessor. The owner will just re-connect the cook stove as soon as he/she receives the updated CO (I have never heard of an updated CO). To be consistent with the permit that

was approved, I would require that the kitchen be eliminated in total as this exceeded the scope of the permit. I would not provide a letter of compliance to the bank until the assessor determines that the use is that of a single family home. One reason for this determination is that it is not good policy for one unit of government to say it is a two family while another calls it a single family home. We must remember that CEOs are not obligated to provide assurances to banks for purposes of their underwriting requirements. This is not to suggest that we should not strive to resolve issues when at all possible.

**Another answer:**

I'd be willing to issue a CO or other document saying that it's acceptable to occupy the building for a given occupancy but making it clear that that document is not certifying any code compliance other than zoning, since you don't know if it meets the building, plumbing, electrical, mechanical, etc. codes since you didn't inspect it while it was being built, and can't tell from the file if it was inspected or approved.

On the second matter, it sounds like they bootlegged the second dwelling unit in illegally. Whether removing the stove converts the building back to a single family dwelling depends on your definition(s) of "dwelling unit", and your (and your attorney's) feeling on whether a cookstove is necessary for the space to meet the definition or not. You can do a lot of cooking with a toaster oven, microwave, and a hotplate. What your assessor does is up to him. If the building is a single family dwelling per the applicable codes that you administer, him calling it a two family based on what someone might do sounds iffy. If you're on solid codes ground, the discrepancy between departments is his problem, not yours.

**The Question:**

Good morning mooses:

I have a builder who wants to build a house on piers. Is the floor R value still R-30? And what does he need to cover that ?

**An answer:**

My read is that it's R-30 or insulation that fills the cavity with an R value of at least 19 (footnote g in table 402.1.1). I don't see any specs in the IECC about what to sheath the underside of the house with. He'll want to sheath it with something to keep the bugs and critters out. Maybe someone else knows of a spec. Typically, one's I've seen are sheathed with thin plywood.

**Another answer:**

We just had this discussion at the floodplain management workshop with regard to elevated structures on foundations with hydraulic openings. We determined that the building envelope has to begin at the bottom of the first floor which contains conditioned area. R-30 or insulation sufficient to fill the frame cavity with a minimum R-19. Let them sheath it with a good layer of common sense.

“Sheath it with a good layer of common sense!”

Lewis Cousins  
Presque Isle

**The Question:**

Good Morning all,

How does MUBEC apply to the snow load capacity for used mobile homes? I have a person who wants to add a pitched roof to his older mobile home. Chapter 900 Manufactured Housing Board appendix B lists my town as having a 30lb roof load. MUBEC states a 90lb roof load. Which applies for rafter sizing of the added roof?

**An answer:**

The answer to your question is part of the manufactured housing board rules and regulations. These rules have been approved by the state as well as HUD. I will attached a copy of 02-385 subchapter J (1) C.



### C. Installation of Onsite Structures

Onsite structures attached to the home shall be installed according to the home manufacturer's installation instructions or be designed and approved by a registered engineer or registered architect. Onsite structures which support their own live load and dead loads and are not attached to the home are not covered by this standard and come under the authority of the LAHJ.

Robert LeClair  
Executive Director  
Maine Manufactured Housing Board  
(Thank you Bob!)

#### The question:

Hi All,

I'm a bit confused on the frost protection requirements for a residential accessory garage. The garage is 50'x100' (5000 sq ft) and is being built with a four foot frost-wall and slab on grade. If the garage is unconditioned, where would frost protection be required? Is insulation required on the frost wall? Is insulation required under the slab? What are the R-value requirements?

Would any of this change if they decided to make this a conditioned (heated) garage?

Thanks in advance for your help.



#### An answer:

The IRC cut-off for accessory structures is 3000 square feet so this building would be reviewed under the IBC. It sounds like a group U unless the motor vehicle portion exceeds section 406 (another 3000SF cut-off). I don't think much other than means of egress would be affected; the IRC requires means of egress for dwellings, not accessory structures but a group U this size in the IBC would likely need one exit with a 75' maximum travel distance; section 1021.2. There may be other U requirement too? It may be worth checking into. The frost protection requirements are in IBC 1809.

**Another answer:** (This answer ignores the fact that the subject garage is an IBC building, but contains some great info for IRC buildings.)

First key is what is your frost depth . If it's 4 feet, section R403.1.4.1 item 1 lets you extend below the frost line per table R301.2.(1) Then the support walls of the structure are protected. The slab on grade is not a part of the supporting structure thus not required to be insulated. If frost depth is more than 4 feet you can supplement with rigid foam designed for direct burial. This is identified in ASCE 32 as an option. If this were a slab on grade with turndown footings (haunched slab) then you would be in a different world, with a need to insulate under the slab and add 4 feet beyond the perimeter.

Lastly to your question of making the building a heated structure (64 degree mean temp.) Then the slab edge would require an R10 insulation for 4 feet of perimeter of the interior slab and an R10 "rim" against the frost wall to break the thermal conductivity. But be aware that if the slab is "heated" then the R-value jumps to R15.

#### The question:

Hi all

Question in section 1910 of the IBC regarding slabs. I have a 36,000 + Sq. foot store being built here in town. Before the slab is poured will there have to be a vapor retarder? Under the exceptions, #3 allows no retarder where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building. Does this building need a vapor retarder according to the IBC?

**An answer:**

Absolutely, unless you can find and agree with an engineer who feels that moisture migrating up through the slab will not be detrimental to a retail store. The foundation for this building has to be designed by an engineer, with the moisture control details included with the plans.

**The Question:**

Hoping someone can point me in the right direction for Code of what a commercial kitchen steamer unit would need for hood venting. My gut says it would need SOMETHING but not finding much documentation to back that up. Depending on the size of the unit I am also assuming that manufacturers specs might require it but they are in design stage at this point and I do not believe that they have picked out a particular unit.

Thanks as always for any help you can give!

**An answer:**

Code requires that the thing has to be installed per the manufacturer's instructions. Those will include the required venting. The project designers will select a unit, and in theory design the project so that the unit will be installed per the manufacturer's instructions (clearance to combustibles, venting, fire suppression (as applicable—they're not generating many grease laden vapors with a steamer), etc.). Of course, you have to be comfortable that they've done that when you approve the plans. For many pieces of equipment nowadays, you can access the install manual on the manufacturer's website. If this is a commercial project, it may require a registered design professional (architect, engineer, etc.). Let them do the heavy lifting, and demonstrate to you why/how their design meets the applicable code requirements. If the manufacturer doesn't require venting for the unit, someone (the HVAC engineer) may want to consider the effects of putting all that moisture into the building.

**The Question:**

Hello all, can anyone direct me to the legislation that discusses what qualifies for a SFMO construction permit?? I am looking for a title and chapter please. I was told by someone at the FMO that all mixed use occupancies must be reviewed by the FMO. This is the bit of code or legislature that I am looking for. I can't find it anywhere and I need so see it in writing regardless of who is giving me the information. I have asked the individual that told me this to send me to section of code but there has been no response. Thank you for your thoughts, and Happy Holidays!



**An answer** (from the State Fire Marshal's webpage. Contact them for the statutorial authority):

**Construction Permits are required for public buildings**, whether it is new construction, renovation work affecting fire safety elements, or change of use. The construction permit will be required regardless of the project cost. The list of "public buildings" below is not all-inclusive. Please call (207) 626-3880 if you are not certain whether or not your project will require a construction permit from the State.

- **Educational:** Occupancies such as schools, and day care centers (more than 12 children).
- **Health Care:** Occupancies such as hospitals, convalescent homes, nursing homes, ambulatory care centers, and board and care facilities.

- **Places of Assembly:** such as auditoriums, bowling lanes, churches, conference rooms, courtrooms, dance halls, drinking establishments, exhibition halls, gymnasiums, libraries, theaters, passenger terminals, pool rooms, recreational, piers, restaurants, auction halls, and skating rinks.
- **Mercantile:** Occupancies such as shopping centers, department stores, auction rooms, and supermarket.
- Class A - 30,000 square feet plus, or 3 stories
- Class B - 3,000 to 29,000 square feet, or 2 stories
- **Hotel, Motel, and Dormitory:** Occupancies two or more stories; more than 16 accommodations.
- **Lodging or Rooming:** Occupancies providing more than 3 but not more than 16 accommodations. (Accommodation means the sleeping area for one person. A double bed or larger would constitute more than one accommodation. A fold-out couch in a room of a condo for lease would constitute a sleeping room and two accommodations.)
- **Business:** Occupancies one story of 3,000 square feet or more, or two or more stories; such as: city halls, college instructional buildings, courthouses, dentist offices, general offices, research laboratories, ambulatory outpatient clinics, and town offices.

For more information please contact Licensing and Inspections at 207-626-3880.

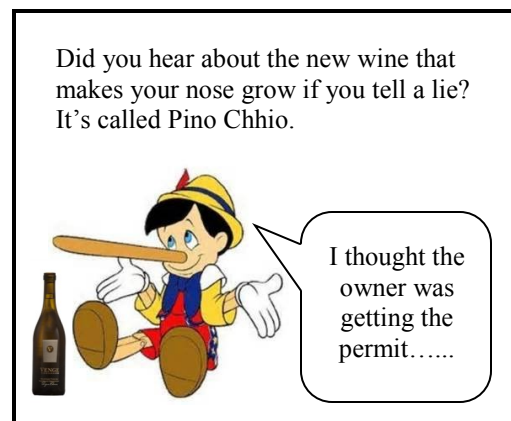
#### **Barrier-Free Construction Permits**

As of January 1, 1991, the Office of State Fire Marshal is authorized by the Maine Human Rights Commission to conduct mandatory and voluntary plan reviews and issue **Barrier-Free permits for places of public accommodation and/or places of employment.**



**New Construction\* projects.** As of January 1, 1996 regardless of cost or size, the following occupancies require a Barrier-Free permit and design professional:

- Educational
- Health Care, residential care, nursing home, or any facility licensed by DHHS
- Places of Assembly
- Mercantile
- Hotel, Motel, and Dormitory
- Lodging and Rooming
- Business



\* A renovation project is considered to be new construction by the Maine Human Rights Act, if the alteration affects at least 80% of the area of the building.



**A Design Professional**, licensed with the State of Maine, is required on projects over \$50,000 to certify compliance with state and federal accessibility laws. (This applies whether the project is new construction or an alteration).

**Renovation projects** (A Barrier-Free permit may be obtained on a voluntary basis).

**All projects applying for a Barrier-Free Permit are also required to apply for a Construction Permit.**

**A Barrier-Free permit is issued in conjunction with a construction permit. These state permits are in addition to any local permits that may be required.**

For more information please contact Licensing and Inspection at 207-626-3880.

[Nothing on there about all mixed uses needing SFMO permits. Call their office to follow up/find out for sure?]

#### **The Question:**

Natural gas has come to town, and people are converting from oil to gas fired heat. Some are unhappy about the NFPA 31 requirement that they remove their oil tank from the building, saying that they'd like to keep the oil tank, in case they want convert back later, such as if gas prices rise sharply. Can an oil tank remain in a building that's converted to gas?

**The answer:** (from Pete Holmes, of the Fuel Board -Thank You Pete!)

The Board excludes the section in NFPA 31 for tanks temporarily taken out of service, and has the following language proposed for the new rule:



## **6.2 Exceptions and Additions to Adopted Standards**

### **6.2.1 NFPA #31, Standard for the Installation of Oil Burning Equipment (2011 edition)**

The Board does not adopt the exception to Chapter 7, Section 7.12, Abandonment and Removal from Service of Tanks and Related Equipment. (See instead Chapter 8, Section 8.9.4 of the Board's rules.)

## **8.9 Oil Supply Tanks**

### **8.9.4 Tank Requirements Upon Conversion to an Alternative Fuel**

If an oil burning appliance is converted to an alternative fuel, but the tank is left in place so that it can be returned to service at some future date, all of the following requirements must be met before the alternative fuel is used:

- 8.9.4.1 The vent piping must remain intact and open to the outside of the building;
- 8.9.4.2 The fill pipe must be removed completely and the tank must be plugged with a threaded malleable iron plug;
- 8.9.4.3 The burner supply line must be removed and the valves on both the tank and burner must be capped or plugged; and
- 8.9.4.4 If an underground oil supply line is in use and complies with Section 8.9 of this Chapter, it may remain in place provided that all of the following conditions are met:

1. The oil line is emptied of its contents;
2. The oil line is disconnected from the oil tank and burner; and
3. The oil line is plugged on both ends in addition to the burner and tank fittings being plugged.

Oil can remain in the tank unless prohibited by the local Authority Having Jurisdiction or the Department of Environment Protection.

## DIDJOO KNOW?

Miscellaneous tidbits from  
The Codesland Cafe



### State law again allows flue sharing

After years of not allowing it, state law (MRSA 32 sec 18107) again allows oil and solid fuel fired appliances to share a chimney flue, for both existing and new installations, as detailed below:

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;

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.

Note that the manufacturer's instructions may prohibit interconnecting, and that it is NEVER OK for a gas fired appliance to share a flue under this law.



### Modular apartment buildings don't have to be sprinklered

If you're a MUBEC or MUBC town, stick built IBC apartment buildings have to be sprinklered, since they're an R-2 use. If they're manufactured housing, however, they don't, since The Manufactured Housing Board adopted the 2009 IRC, deleting the sprinkler requirement. Go figure. (Are the occupants of modular buildings less combustible than the occupants of stickbuilt ones? We're the government and we're here to help...)



### Under certain (rare) circumstances, abandoned oil tanks do not have to be removed from the building.

NFPA 31, in effect statewide, requires that an abandoned inside oil tank has to have the fill and vent piping removed, be emptied, purged of combustible vapors, and removed from the building (see the rules for temporarily abandoning a tank in the Moosechat section of this rag). In rare instances, where removing the tank from the building will require an extraordinary effort and/or expense, it may be allowable to do all of the above, except instead of removing the tank, it is allow-



able to cut it into pieces and leave the pieces in the building. Check with your State Fuel Board inspector for details, on a case by case basis.

### **It is illegal (and dangerous) to place insulation against knob and tube wiring**

There is still a fair amount of knob and tube wiring in Maine (New England has the oldest housing stock in the nation). Insurance companies are having people remove/abandon it, but there is still quite a bit in service. It is illegal and dangerous to place insulation against knob and tube wiring. It was designed to be in free air, and insulating it can cause it to overheat, creating a fire hazard. Knob and tube wiring is legal/acceptable if:



1. It's installed properly and is in good condition.
2. It's not fused at over 15 amps.
3. It has not been spliced into.

A lot of knob and tube wiring has had NMC/Romex wiring spliced into it. Someone stripped the insulation off the K&T conductors, wrapped the Romex conductors tightly and carefully around the bare K&T conductors, in some cases soldered the new wiring to the old, and then wrapped the splices neatly and thoroughly with electrical tape. No matter how nice a job they did, splicing into K&T wiring has never been legal, and splices like this are a violation of the electrical code. Often, also, mice or squirrels have been nibbling on the insulation, sometimes where you can see it, and sometime where you can't. Most K&T wiring is around 100 years old, and replacing it is never a bad idea.

### **Plumbers, well pump installers, and heating techs can do some wiring:**

A plumber can only do the wiring to replace, not install a water heater and water pump, and the unit being installed has to be the same size or smaller than the one being replaced. There is a water pump electrical license that allows wiring from the panel to the water pump. Most plumbers do not have that license. Licensed heating people can wire from the panel to the heating plant. That comes under a memorandum of understanding between the Electricians Board and the Fuel Board. (Thank you Ray Stanford, State Electrical Inspector)



### **Some projects require a permit from the DOT**

Some projects require a Traffic Movement Permit, from the Maine DOT (generally, projects that generate or relocate a large amount of traffic). If you, or developers want to find out if a project requires one, contact the office that covers your town below:

Region 1	Southern Region	Scarborough	885-7000
Region 2	Midcoast Region	Augusta	624-8200
Region 3	Western Region	Dixfield	562-4228
Region 4	Eastern Region	Bangor	941-4500
Region 5	Northern Region	Presque Isle	764-2060



### **You can email power connect authorizations to CMP!**

Tired of waiting on hold to approve a power connect or reconnect with CMP? Sick of hearing that recorded woman's voice thanking you for your patience? (You know she doesn't mean it.) You can email in your approval to [gettingconnected@cmpco.com](mailto:gettingconnected@cmpco.com). It's quick and easy and creates a written record. That'll fix 'em. (Thank you Jim Butler in Scarborough for this tip!!!)





## Extending the MBOIA tentacles to other professions, Tom and Scott Take The Codes Show On The Road



Filling a last minute hole in their educational programming, Tom Lister and Scott Davis took the codes show on the road and did a seminar for the Maine Coalition of Home Inspection Professionals – an association of home inspectors, in November, at the Augusta Civic Center. The main thrust of the event was the MUBEC, but we expanded in into an overview of all the codes that apply to existing buildings, which is what the MeChips members are mostly involved with. A stack of books, some code history, Tom's IT/AV skills putting the graphics up on the screen, and some pictures from Scott's "Codes Enforcement Wall of Shame" to close the show with a few laughs made for an informative and entertaining afternoon. While



it was flattering being invited to teach, it was humbling knowing that we weren't their first choice. Thanks to Bo Boden and MeChips for having us, and to Paul for the opportunity to spread The Word.

"Ignorance lies not in the things you don't know, but in the things you know that ain't so."  
Will Rogers



### Still a Good Read

If you like literature about governing, that's way better than The Enforcer (with way bigger staffs and budgets - just sayin'...), "Governing" is a free national magazine about just that. Staffing, infrastructure, finance, ethics, politics - you'll find something in every issue that's germane to what's going on in Maine and/or your municipality. You can sign up for a free subscription at their website ([www.governing.com](http://www.governing.com)). It's FREE!

### 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 winter. I hope you enjoyed The Enforcer.



