



CODE WORKS!

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Fall 2014

WORDS FROM DIRECTOR IRVIN J. POKE, AIA

1

Words from the Director

2

Michigan Building Energy Code Compliance Enhancement Project

3-3B

Construction Codes and the Referenced Standards

4

Weather Resistant Receptacle Outlets & Covers

LP-Gas Piping Isolation Requirements

5

Reopening Device for Power-Operated Car Doors or Gates

Upcoming Events

6

Boilers Exempt from Michigan Boiler Act of 1965

7

2012 Michigan Building Code, Chapter 34 Existing Structures

Michigan Codes & Rules

Currently in Effect

8

An Alternative to Annexation

9

Plumbing Code Requirements for Thermal Expansion of Potable Water System

10

BCC Contact Information

2014 Board & Commission Mtgs.

11

2014 License Examination Dates

Online Services

Every governmental subdivision that elects to administer and enforce the Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230, and the state construction code must maintain a Construction Board of Appeals (CBA) in accordance with MCL 125.1514. This section of the act prescribes that an appeal must be heard and a decision rendered and filed within 30 days after submission of an appeal. There have been cases where a governmental subdivision has not maintained an active CBA and cannot meet the timeframe specified by statute. When the required timeframe cannot or is not met, the appeal is considered denied for the purpose of authorizing the institution of an appeal to the Construction Code Commission. Therefore, it is a good idea to annually review the appointments to the CBA to assure they are current. If there has not been an appeal in a considerable amount of time, it is also prudent to make sure the appointed members are still available and willing to serve.

The members of a CBA should be qualified by experience and training to perform the duties of an appeal. They should not be employees of the governmental subdivision or the agency enforcing the code. If the CBA will handle appeals from all four of the disciplines: building, electrical, mechanical, and plumbing, the membership should have the appropriate experience and/or knowledge of each trade. A design professional member on the CBA will be invaluable when the appeal concerns an architectural or engineering issue.

It has been observed that some CBAs are not issuing a proper decision. The decision shall be a document with a statement of reasons for the decision as required by MCL 125.1514(1). The decision should be signed by the appropriate member of the CBA. A set of draft, unsigned minutes is not a proper decision.

Another critical issue is that the CBA is required to hear the appeal in accordance with the Open Meetings Act, 1976 PA 267, as stated in MCL 125.1514(3). The statute provides lots of guidance on proper implementation through reference to other statutes. The code official needs to review these referenced statutes in order to assure proper and fair code administration.

Contrary to what is often heard, an appeal is not a vehicle to waive or set aside code compliance. This is clear in Section 113.2 of the Michigan Building Code and Section R112.2 of the Michigan Residential Code, and affirmed by MCL 125.1515. The CBA shall make findings whether a code provision applies, is applied correctly, or an alternative offered is equal to or better than what is required by the code. The granting of a variance resulting from an appeal does not set a precedent for future projects. A variance is based on the specific facts of an appeal, and only applies to the case where the facts have been established before the CBA. The CBA is generally not the venue to appeal statutory requirements.

Questions regarding the CBA may be directed to the Plan Review and Building Division at (517) 241-9328 or via email at bccplanreviewcodemail@michigan.gov.

MICHIGAN BUILDING ENERGY CODE COMPLIANCE ENHANCEMENT PROJECT

By **Irvin Poke, Director**

As you may have heard at the recent COCM and SEMBOIA conferences, DTE Energy and Consumers Energy will soon be conducting a joint research effort to determine the feasibility of designing and launching an energy code support program in their service territories. Assuring compliance with the energy code is an important aspect of providing safe, comfortable, and well-built homes and commercial buildings for our local communities and residents. By helping enhance code compliance efforts, utilities can help save their customers energy and money, and receive credit for these energy savings towards their energy efficiency savings targets.

In other states that have launched similar programs, the utilities typically have provided a wide range of support to the construction community in their work with the energy code, including:

- Advanced and sector specific training
- Online resources
- Circuit rider assistance (traveling staff)
- Third party reviews
- Guides and checklists

As part of this project, researchers will conduct building site visits to understand how the energy code is being implemented in the field. Key facts about their research include the following:

- Field researchers will make brief visits to construction sites to observe the installation of specific energy code related items.
- This work is for research purposes only. Field observations will be anonymized and no identifying, site specific information will be transmitted to code officials, builders, owners, or anyone outside the research team.
- The results of this important research will both inform the understanding of how the energy code is working in Michigan and be used in the design of a program to support code officials, builders, and designers in their work with the energy code.
- The first phase of the research effort began in early November 2014 and focuses on residential construction in both DTE Energy and Consumers Energy service territories.
- The second phase will begin in early 2015 and focus on commercial construction in the DTE Energy service territory only.

The in-the-field research will be led by Pure Eco Environmental Solutions based in Troy, Michigan. They will be contacting building department officials in selected jurisdictions and requesting information and opportunities to review plans and visit construction sites. If they contact you, the project's success depends on you granting that interview or helping set up times for plan reviews or site visits. The research team is aware of the busy schedules we all keep and will not be asking for a significant time commitment from you.

For questions regarding the program, or the many support resources it can bring to the building code community, please contact Tim Guiterman at 802-526-5114/tim.guiterman@navigant.com, or visit <http://tinyurl.com/michcodestudy>.

OFFICE OF ADMINISTRATIVE SERVICES

CONSTRUCTION CODES AND THE REFERENCED STANDARDS

By Deborah Young, Director
Office of Administrative Services

The State Construction Code Commission directed the Bureau of Construction Codes to send a letter to all local units of government (see pages 3A and 3B) as a reminder that to properly administer the code(s) a jurisdiction must have access to the standards referenced in the building, electrical, mechanical, plumbing, and residential code books to properly administer the Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230.

The bureau has fielded a variety of questions since the letter was mailed on September 4, 2014, but there are two questions that seem to come up most often:

1. We've been enforcing the code(s) for years and get new standards for every code update cycle. Why are you sending this letter?
2. It's really expensive to buy the standards. Can't I share the cost with someone?

With regard to question #1, after further discussion we usually find there is confusion between codes and standards. The standards are listed in the back of the code books and are separate publications from the code books. For instance, the standards referenced in the 2012 Michigan Mechanical Code are listed in Chapter 15 and would need to be purchased in addition to the code book.

As noted in the second question, compiling a library of standards is an expensive undertaking. And that's why the bureau created a list of essential referenced standards—those standards most likely to be needed on a regular basis to enforce the codes—that significantly reduces the cost of creating a complete library. Other ways of reducing the cost can include joining together with other enforcing agencies to create a shared library, or working with a university or professional association to access referenced standards they may have. You are not limited to these options and we encourage you to come up with other models that will provide the public and your inspectors and plan reviewers with practical access to the standards.

Questions about creating a library of referenced standards may be directed to the Office of Administrative Services at (517) 335-2972 or by email at bccoas@michigan.gov.





RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
BUREAU OF CONSTRUCTION CODES
IRVIN J. POKE
DIRECTOR

MIKE ZIMMER
ACTING DIRECTOR

September 4, 2014

Dear Enforcing Agency:

The State Construction Code Commission has directed that a letter be sent to all local units of government as a reminder that to properly administer the Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230, and apply the state construction codes, the jurisdiction must have access to the standards referenced in the code books in addition to the various code books themselves. This applies to jurisdictions already enforcing the code(s) and jurisdictions who may apply in the future to enforce the code(s) under Section 8b(6) of 1972 PA 230. The commission is encouraging all existing enforcing agencies to start a library of or provide access to the referenced standards.

The first national model codes published in the 1950's were prescriptive in nature and referenced only a few standards. As the code development process advanced it became clear that it was more efficient to rely on references to these standards as opposed to incorporating them in the codes. Standards writing organizations do a very good job of updating standards as the science changes. Therefore, the code development process now focuses on which standard is to be applied and to what, rather than including all the language from a standard. Today's codes alone do not provide the details necessary for plan review and construction.

If a plan reviewer does not have access to the standards, he/she cannot verify that the structural, fire protection, electrical, mechanical, and plumbing systems are in compliance with the code as the verification criteria is not in the code, but in the standard. Therefore, it is critical that an enforcing agency has access to these standards to assure the public health, safety, and welfare.

As a result, local units of government applying to enforce the codes under 1972 PA 230 must demonstrate that they already possess the referenced standards or have immediate access to the standards for all the disciplines for which they seek authority. This is not a new requirement, but previously the Bureau of Construction Codes would accept a statement from a local jurisdiction that the codes and standards were available. What was found, however, is that there was often confusion and instead of jurisdictions having the referenced standards available only the code books were available.

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“Access” is being defined to mean that the plan reviewers and inspectors in an enforcing agency have practical use of the standards to facilitate proper code enforcement. This access can be provided in different ways. For example, an enforcing agency may purchase the standards and maintain its own library, an enforcing agency may have privileges to use a university or professional society library, or several governmental subdivisions may form a cooperative to fund and maintain a library.

The Construction Code Commission and the bureau recognize that creating a full library of standards would be very costly—in excess of \$100,000 for all the standards. In response to cost concerns from local units of government, the bureau has created a list of *essential* referenced standards that pares the full list down to those standards most likely to be needed on a regular basis to enforce the codes. A complete library of *essential* standards would cost under \$30,000, a significant reduction from the cost of a full library. A list of the essential standards is available on the bureau’s website at www.michigan.gov/bcc under “What’s New” and is provided in both summary and individual code format.

If you have questions about obtaining referenced standards for a library, please contact the Office of Administrative Services at (517) 335-2972 or bccoas@michigan.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Irvin J. Poke". The signature is fluid and cursive, with a long, sweeping underline that extends down towards the "cc:" line.

Irvin J. Poke, AIA
Director

cc: Construction Code Commission
BCC Division Chiefs

ELECTRICAL DIVISION

WEATHER RESISTANT RECEPTACLE OUTLETS & COVERS

**By Dan O'Donnell, Chief
Electrical Division**

Receptacles that are installed outdoors as well as other damp and wet locations are often subjected to conditions such as temperature variations, exposure to direct sunlight, and abusive and abnormal conditions including construction sites as well as commercial and industrial facilities. Conditions such as these may adversely affect receptacles and cause premature failure.

Article 406.8 (A) and (B) in the 2008 NEC/NFPA 70 was changed to require all 15 and 20 amp, 125 and 250 volt nonlocking receptacles installed in damp and wet locations to be listed as the weather resistant type. The 2011 Code includes a new requirement in article 406.9(B)(1) that stipulates that for other than one- or two-family dwellings, the outlet box hood shall be identified and listed for "extra-duty" use if supported from grade as described in article 314.23 (B) or (F) . There is an exception to 406.9 (B) (1) that stipulates that receptacles rated 15A and 20A that are subjected to routine high-pressure washing spray may have an enclosure that's weatherproof when the attachment plug is removed.

Receptacle outlets and covers listed and identified for use in the more rugged conditions that damp and wet locations present are constructed with materials that are more resistant to the corrosive and abusive conditions that prevail in those environments.

Manufacturers have determined that the plastic surface material of weather-resistant receptacles must have UV resistance to ensure that deterioration from sunlight is minimal or prevented. In testing, receptacles are subjected to temperatures cycling from very cold to very warm conditions, and then subjected to additional dielectric testing. The rapid transition from cold to warm temperatures will change the relative humidity and moisture content on the device. The dielectric test ensures that this won't create a breakdown of the insulation properties.

As code officials and installers it is important to assure that the right products and equipment are utilized for the intended use. Being mindful of the requirements for receptacle outlets and covers used as part of an outdoor installation or in other damp or wet locations will help minimize the possibility of electric shock as well as premature failure of those devices.

Questions may be directed to the Electrical Division at (517) 241-9320 or by email at bccelec@michigan.gov.

MECHANICAL DIVISION

LP-GAS PIPING ISOLATION REQUIREMENTS

**By Jonathon Paradine, Assistant Chief
Mechanical Division**

The 2012 International Fuel Gas Code, Section 404.10 Isolation, states "metallic piping and metallic tubing that conveys fuel gas from an LP-gas storage container shall be provided with an *approved* [emphasis added] dielectric fitting to electrically isolate the underground portion of the pipe or tube from the above ground portion that enters a building. Such dielectric fitting shall be installed above ground, outdoors."

The required isolation fitting is intended to isolate the piping/tubing in the building from the piping/tubing extending underground to the LP storage tank.

A dielectric fitting is required on all new installations in addition to existing installations when modifications or replacement of the piping from the LP-gas storage container to the second stage regulator are performed.

Questions regarding this article may be directed to the Mechanical Division at (517) 241-9325 or by email at bccmech@michigan.gov.

ELEVATOR DIVISION

REOPENING DEVICE FOR POWER-OPERATED CAR DOORS OR GATES

By Calvin Rogler, Chief
Elevator Division

The 2010 Michigan Elevator Rules became effective July 11, 2014. One of the rules rescinded by the new rule set is R 408.7036 (Rule 36) Reopening device for power-operated car doors or gates. This rule prohibited the use of any devices which were designed to bypass the door opening device or reopening device when the door is open for a predetermined amount of time (nudging).

Because Rule 36 was rescinded, the requirements in ASME A17.1-2010, Section 2.13.5.1, are now in effect and shall be applied to reopening devices for power-operated horizontally sliding car doors or gates, as stated below:

2.13.5.1 Where required by 2.13.4, a power-operated car door shall be provided with a reopening device that will function to stop and reopen a car door and the adjacent landing door sufficiently to permit passenger transfer in the event that the car door or gate is obstructed while closing. If the closing kinetic energy is reduced to 3.5 J (2.5 ft-lbf) or less, the reopening device shall be permitted to be rendered inoperative. The reopening device used shall be effective for substantially the full vertical opening of the door (see 2.13.4.2).

This change in the Michigan Elevator Rules now allows the use of a device to bypass the door reopening device when the door is open for a predetermined amount of time (nudging). The device must comply with the kinetic energy requirements stated in the code section.

However, elevators used for accessibility must also comply with ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities. A117.1 requires the reopening device to stop and reopen the door automatically when obstructed and to remain effective for 20 seconds minimum. The doors must remain in the fully open position as required in ICC/ANSI A117.1 before they may begin to close. The hall/car call button is not permitted to shorten the required stand open time required by A117.1.

The change applies to all new elevator installation and alteration permit applications which are received on or after the July 11, 2014, effective date of the new rule set. For elevators installed or altered prior to that date, the old rules still apply and nudging is not allowed. An alteration permit may be applied for to modify the reopening device and add nudging to an existing elevator door system.

The new rule set is available in PDF format on the Elevator Safety Division webpage under Public Acts & Administrative Rules, "2010 Michigan Elevator Rules (Print Version)," and may be downloaded free of charge.

If you have any questions and would like to discuss any of the new requirements, please call the Elevator Safety Division at (517) 241-9337 and please have your code book open to the section in question. You may also contact the division via email at elevsafety@michigan.gov.

Upcoming Events

Michigan Residential Code – The bureau is holding a public meeting on the need to update the current Michigan Residential Code with the 2015 edition of the International Residential Code in accordance with the State Construction Code Act, 1972 PA 230, Section 4 (6).

December 10, 2014, 9:00 a.m.
Conference Room 3
2501 Woodlake Circle, Okemos, MI

Electronic Plan Review – The bureau is holding a focus group to preview the electronic plan review program we expect to implement in May 2015. Architects, professional engineers, code inspectors/plan reviewers, and other parties interested in attending the focus group should contact the bureau at bccinfo@michigan.gov no later than December 5, 2014.

December 16, 2014, 1:30 p.m.
Conference Room 3
2501 Woodlake Circle, Okemos, MI

BOILER DIVISION

BOILERS EXEMPT FROM MICHIGAN BOILER ACT OF 1965

By David Stenrose, Assistant Chief
Boiler Division

There are several instances where boilers installed in the state of Michigan do not fall under the requirements of the Boiler Act of 1965. The Boiler Act of 1965, 1965 PA 290, addresses these exemptions in Section 7, MCL 408.757, as well as in the 2013 Michigan Boiler Code Rules, 408.4012 and 408.4047.

Boilers which do not fall under the requirements of the Boiler Act include:

- Boilers under federal control, whether the building is owned or leased in whole by the federal government.
- Boilers on tribal lands. The US Constitution grants the federal government exclusive authority over relations with Indian tribes. US Const t I, §8, cl. 3. Congress has broad authority to legislate in regards to Indian tribes and, unless Congress provides otherwise, Indian tribes fall under nearly exclusive federal, rather than state, control. Since Congress has not ceded the requisite authority to Michigan, the state can neither require tribes to secure permits for boiler installation on Indian lands, nor can it require that the tribe submit to an inspection of existing boilers. Boilers cannot be inspected on tribal lands unless the chief of the tribe requests in writing and provides valid reasons documenting the need that a boiler be subjected to the requirements of 1965 PA 290. The Boiler Division and the Bureau will review the request and issue a decision on whether the boiler warrants an inspection.
- Boilers used in the power plants of self-propelled vehicles designed primarily for the transportation of persons or property upon a highway, except vehicles used exclusively upon stationary tracks or rails. Steam powered cars are exempt; locomotives are not exempt.
- Boilers used solely for agricultural purposes, such as on mint farms or in greenhouses with no public access.
- Miniature steam or marine engines used as a hobby.
- Steam or vapor boilers carrying a pressure of not more than 15 p.s.i.g., and hot water boilers operated at a pressure not exceeding 160 p.s.i.g. or a temperature not exceeding 250 degrees Fahrenheit, which are located in a private residence or in an apartment building with a capacity of less than 6 families.
- A swimming pool heater, open car wash heater, and similar types of equipment which do not have intervening valves or a reduction in pipe size on the return or discharge piping, and which do not create more than normal circulating pump pressure.
- A non-vaporizing, organic fluid boiler if the following criteria are met:
 1. The system is vented and does not have valves or restrictions between the boiler and the vent.
 2. The vent pipe is sized so that thermal expansion of the fluid will not result in increased pressure on the system.
 3. The owner or user provides the Boiler Division with calculations performed by an engineer which verify that pressure due to thermal expansion cannot exist in the boiler as installed.
- A low pressure steam boiler that has a volume of less than 5 cubic feet and that does not have piped feed connections.
- Water heaters used for the supply of potable hot water, in commercial or industrial sizes providing corrosion resistance at pressures not exceeding 160 psi, which do not exceed any of the following:
 1. A heat input of more than 200,000 btu/hr.
 2. A water temperature of more than 210 degrees Fahrenheit.
 3. A nominal water-containing capacity of more than 120 gallons.

If a boiler is going to be installed in residences or buildings that are exempt from the act, Section 13 (2), MCL 408.763 (2), of the Boiler Act states that “a person licensed under the Forbes mechanical contractors act, 1984 PA 192, MCL 338.971 to 338.988, in the classification of hydronic heating and cooling and process piping may install, repair, alter, and remove a residential boiler installed in a residence exempt from this act under section 7 without obtaining a license under this act.”

Should you have any questions, we invite you to contact the Boiler Division at (517) 241-9334 or by email at bcblr@michigan.gov.

PLAN REVIEW AND BUILDING DIVISION

2012 MICHIGAN BUILDING CODE, CHAPTER 34 EXISTING STRUCTURES

By **Todd Cordill, NCARB, Chief**
Plan Review and Building Division

Over the past several years, a majority of construction projects under the bureau's code enforcement jurisdiction have involved existing structures. Many of these projects have been for alterations, but have also been for additions to existing buildings. Chapter 34, Existing Buildings and Structures, of the 2012 Michigan Building Code is a valuable source of information for the requirements for alterations, repairs, additions to, changes of use or occupancy, and moved or relocated buildings. There are individual code sections for additions, alterations, repairs, change of occupancy, historic buildings, moved structures, and barrier-free accessibility for existing buildings.

Additions to any building or structure shall comply with the requirements of the building code for new construction. If any existing structural members or foundations will bear any surcharged loads, then the existing structural members shall comply with current code requirements for support of the surcharged loads. Also, an existing building plus additions shall meet the building height and area limitations of Chapter 5 of the code. Otherwise, a fire wall meeting Chapter 7 code requirements shall be constructed to define an addition and an existing building as separate buildings.

For alteration projects, an existing building or structure shall be no less in compliance with the code than it was prior to the alteration work. If alterations cause an increase of more than 5 percent in gravity loads on existing structural members, then those members shall be strengthened, supplemented, or replaced. Likewise, existing structural elements carrying an increase in lateral load per ASCE 7 shall be evaluated and may need some structural improvements. The building code requirements for repairs are oriented toward substantial damage to structural members. If there is such substantial damage, then an evaluation of the structural members shall be prepared by an architect or professional engineer and submitted to the building official. For historic buildings, many provisions of the code may not be applicable if it is determined by the building official that such buildings do not constitute a distinct life safety hazard.

No change of occupancy or use shall be made to a building or structure unless it complies with the building code requirements for that use or occupancy. Risk categories of different uses found in Chapter 34 are used to determine if a greater or lesser life safety risk results from such a change of use or occupancy.

Many barrier-free requirements are found in Section 3411 of the code. Of utmost importance are references to Michigan's barrier-free law, 1966 Public Act 1. Compliance with new and/or existing code requirements is determined by following the language of this law for the extent of alterations, changes of occupancy, or occupant load changes. There are various provisions in the code that address compliance within an existing building or structure.

Likely the most valuable tool for design professionals and code officials is found in the compliance alternatives provisions of Chapter 34. If code compliance is not readily achievable, then there various values that can be assigned and used for calculating code compliance. A summary sheet is provided toward the end of the chapter that needs to be used in conjunction with the compliance alternatives. As various values are used from tables in the code, they shall be filled into the summary sheet in order to determine code compliance.

Please address questions to the Plan Review & Building Division at (517) 241-9317 or by email at bccbldg2@michigan.gov.

MICHIGAN CODES & RULES CURRENTLY IN EFFECT

2013 Boiler Rules	12/02/2013
2012 Building Code (Part 4)	10/09/2014
Building Officials, Plan Reviewers, and Inspectors	04/24/2013
2011 Electrical Code (Part 8)	07/01/2013
2010 Elevator Safety Board General Rules	07/11/2014
Manufactured Housing General Rules	09/02/2008
2012 Mechanical Code	09/27/2013
2012 Plumbing Code (Part 7)	01/17/2014
2012 Rehabilitation Code	10/09/2014
State Boundary Commission	07/01/2013
Subdivisions of Land	06/16/2008
Survey and Remonumentation General Rules	06/21/2013
2009 Uniform Energy Code	03/09/2011

FOR CODE/RULE UPDATES - Visit [BCC's website](http://www.bcc.org) to monitor updates on code review processes.

OFFICE OF LAND SURVEY AND REMONUMENTATION

AN ALTERNATIVE TO ANNEXATION

By Kevin O'Brien, P.S.

Office of Land Survey and Remonumentation

Prior to 1984, annexation was the primary method whereby a city expands by acquiring property from a township. Often, however, annexations are contentious and cause animosity among local governments and their residents.

The Intergovernmental Conditional Transfer of Property by Contract Act, 1984 PA 425, known as the 425 Agreement, was developed as an alternative to the existing annexation process and is another avenue to extend urban-type services to adjacent development and encourage local municipalities to work together to promote economic growth.

The 425 Agreement gave local governments a means for a “conditional” transfer of lands from one or more municipalities to another for a set time period. Under the agreement the receiving municipality agrees to extend its services into the area and share the tax revenue it receives from the transferred area with the other local unit(s) of government. This arrangement provides a “win-win” for all parties without the lands being permanently transferred via annexation.

A valid 425 Agreement must:

- Be used to promote an economic development project (as defined in the statute).
- Specify how taxes will be shared amongst the contracting municipalities.
- Specify the length of the contract (may not be over 50 years). A contract may be renewed at the end of the contract.
- Identify methods of enforcement of the contract.
- Specify which local unit has jurisdiction over the transferred area at the end of the agreement.
- Be filed with the county clerk of the county where the local unit is located, and with the Secretary of State.

Questions about 425 Agreements may be directed to the Office of Land Survey and Remonumentation at (517) 241-6321 or by email at bccolsr@michigan.gov.



PLUMBING DIVISION

PLUMBING CODE REQUIREMENTS FOR THERMAL EXPANSION OF POTABLE WATER SYSTEM

By **Kole D. Myers, Senior Inspector**
Plumbing Division

Sections 607.3 through 607.3.2 of the 2012 Michigan Plumbing Code require that a potable water system be protected from thermal expansion. Section 607.3 states “a means of controlling increased pressure caused by thermal expansion shall be provided where required. . . .” When using a pressure reducing valve in the water service system on sizes up to and including 2 inches (51 mm), a device for controlling pressure shall be installed where—due to thermal expansion—the pressure on the downstream side of a pressure reducing valve exceeds the pressure reducing valve setting.

When installing a backflow prevention device, check valve, or any other device in the water supply system utilizing storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure shall be installed.

Uncontrolled pressure increases due to thermal expansion can have a detrimental effect on all components in a water distribution system. Liquids expand in volume when heated. If the liquid being heated completely fills the vessel of fixed volume, the pressure in the vessel will increase in proportion to the liquid’s rise in temperature. As long as sufficient heat is applied to cause a rise in liquid temperature, the pressure in the vessel will continue to rise until liquid is allowed to escape from the vessel, (relieving the pressure), or the vessel ruptures due to over pressurization. Because a hot water distribution system is necessarily connected to a water heating device, there is the potential for thermal expansion to cause a rise in system pressure. The intent of the referenced sections in the 2012 Michigan Plumbing Code is to require the control of any pressure increase caused by thermal expansion of water being heated.

Regardless of the public water main pressure (and the need for a pressure reducing valve), it is becoming commonplace for water purveyors to install a backflow prevention device at the water meter or to require the building owner to provide a backflow prevention device in the water service piping to the building. The water purveyor requires these backflow prevention devices to comply with federal regulations and maintain certification as a safe drinking water provider. As such most have necessarily established backflow prevention programs to ensure that the public water system is protected from possible backflow contamination. At a minimum, most water purveyors install a dual check valve on the upstream side of the water meter for a building. Purveyors will require certain building occupancies such as restaurants and factories to install backflow devices having a higher degree of protection. The installation of any backflow device will require the control of water distribution pressures caused by thermal expansion of water being heated.

Keep in mind there are several makes, models, and series of expansion tanks available, as well as expansion tanks for use on closed loop hydronic heating systems and well water systems. When designing a system and making the correct choice for expansion needs, only expansion tanks rated for thermal protection for potable water are permitted to be used for any thermal expansion in a potable water system.

Please contact the Plumbing Division Office with any questions or concerns at (517) 241-9330 or by email at bccplbg@michigan.gov.

Providing for Michigan’s Safety in the Built Environment



BCC Contact Information

TELEPHONE NUMBERS:

Administration (517) 241-9302
 Office of Administrative Services (517) 335-2972
 Office of Management Services (517) 241-9313
 Boiler Division (517) 241-9334
 Plan Review & Building Division
 Act 54 Registration (517) 241-9317
 Building (517) 241-9317
 Plan Review (517) 241-9328
 Electrical Division (517) 241-9320
 Elevator Safety Division (517) 241-9337
 Mechanical Division (517) 241-9325
 Office of Land Survey & Remonumentation (517) 241-6321
 Plumbing Division (517) 241-9330

FACSIMILE NUMBERS:

Administration & Office of Administrative Services (517) 241-9570
 Office of Management Svcs, & Plumbing Division (517) 373-8547
 Building, Electrical, Mechanical, Plan Review (517) 241-9308
 Office of Land Survey & Remonumentation, Elevator Safety & Boiler Divisions (517) 241-6301

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 Plan Review - bccplanreviewcodemail@michigan.gov
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 Mechanical Division - bccmech@michigan.gov
 Office of Land Survey & Remonumentation - bccolsr@michigan.gov
 Plumbing Division - bccplbg@michigan.gov



2014 Board and Commission Meetings

MEETING

DATE

TIME

LOCATION

<u>MEETING</u>	<u>DATE</u>	<u>TIME</u>	<u>LOCATION</u>
Barrier Free Design Board	Jan 17, Mar 21, May 16, July 18, Sept 19, Nov 21	9:30 am	Okemos Conf Room 3
Board of Boiler Rules	Mar 11, June 10, Sept 9, Dec 9	9:30 am	Okemos Conf Room 3
Construction Code Commission	Jan 8, Apr 2, July 9, Oct 1	9:30 am	Okemos Conf Room 3
Electrical Administrative Board	Feb 20, May 22, Aug 7, Nov 6	9:30 am	Okemos Conf Room 3
Elevator Safety Board	Jan 24, Mar 28, June 6, Aug 22, Nov 7	9:30 am	Okemos Conf Room 3
Mobile Home Code Commission	March 19, June 18, Sept 17, Dec 17	10:00 am	Okemos Conf Room 3
Board of Mechanical Rules	Feb 12, May 14, Aug 20, Nov 26	9:00 am	Okemos Conf Room 3
State Boundary Commission	Feb 5, Apr 16, June 11, Aug 13, Oct 8, Dec 10	1:30 pm	Okemos Conf Room 3
State Plumbing Board	Feb 25, June 3, July 16, Sept 16, Dec 2	10:00 am	Okemos Conf Room 3

Dates and times are subject to change. Visit the [BCC website](http://www.michigan.gov/bcc) for updates.

ATTENTION READERS!

If you know of an organization or individual that would benefit from the information posted in BCC's newsletter, please direct them to our website at www.michigan.gov/bcc. Under the "Publications, Bulletins & Advisories" heading, click on the Code Works! link for more information on how to subscribe and receive an electronic notification of when each quarterly newsletter is posted.

2014 License Examination Dates

<u>EXAMINATION</u>	<u>DATE</u>	<u>LOCATION</u>	<u>DEADLINE</u>
Boiler Installer and Repairer	Mar 5 & 6	Okemos	Feb 7
	June 4 & 5	Okemos	May 9
	Sept 3 & 4	Okemos	Aug 8
	Dec 3 & 4	Okemos	Nov 7
Fire Alarm Spec. Tech./Sign Spec.	Mar 18	Lansing	Feb 18
	July 15	Lansing	June 17
	Nov 13	Lansing	Oct 14
Electrical - Journeyman	Feb 26	Lansing	Jan 29
	May 29	Lansing	May 1
	Aug 14	Lansing	July 17
	Sept 16	Escanaba	Aug 18
	Nov 19	Lansing	Oct 22
Electrical - Master	Feb 26	Lansing	Jan 29
	May 29	Lansing	May 1
	Aug 14	Lansing	July 17
	Sept 16	Escanaba	Aug 18
Electrical - Contractor	Nov 19	Lansing	Oct 22
	Jan 14	Lansing	Dec 11
	Mar 18	Lansing	Feb 18
	May 13	Lansing	Apr 15
	July 15	Lansing	June 17
	Sept 16	Escanaba	Aug 18
Elevator Contractor/Journeyperson Certificate of Competency	Sept 23	Lansing	Aug 26
	Nov 13	Lansing	Oct 14
	Jan 24	Okemos	Dec 27
	Mar 28	Okemos	Feb 28
	June 6	Okemos	May 10
Mechanical Contractor	Aug 22	Okemos	July 25
	Nov 7	Okemos	Oct 10
	Mar 11	Lansing	Feb 7
	June 10	Lansing	May 9
Plumbing - Contractor	Sept 9	Lansing	Aug 8
	Dec 9	Lansing	Nov 7
	Mar 26	East Lansing	
	June 25	East Lansing	
Plumbing - Master and Journey	July 17	Escanaba	
	Sept 24	East Lansing	
	Dec 17	East Lansing	
	Feb 26	East Lansing	
	June 4	East Lansing	
	July 17	Escanaba	
	Sept 17	East Lansing	
	Dec 3	East Lansing	

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