



CODE WORKS!

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FALL 2008

ATTENTION READERS!

In an attempt to reach more organizations and individuals involved in code inspections, we're asking for your help in getting the word out! 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. Then, click on the "Publications/Bulletins/Interpretations/Advisories" link for more information on how to subscribe to and receive an electronic notification of when each quarterly newsletter is posted.

STATE HOLIDAY OFFICES CLOSED:

November 27, 28
December 24, 25, 31
January 1, 19
February 16

WORDS FROM DIRECTOR IRVIN J. POKE



I came to the bureau in April 1989 after four years of service in the Department of Management and Budget. It was in the fall of that year that Henry Green was appointed executive director of the Bureau of Construction Codes. Henry assembled an excellent administrative and management staff. Beth Aben, at that time, was his executive assistant.

By working through his management staff and with the industry, Henry brought Michigan's construction programs to national prominence. The rules for code official registration and continuing education were shepherded under his guidance. The electronic data collection system for inspections, online permits, the electronic plan review system and database, and the MiTAPS program were implemented via Henry's skillful management.

The Bureau of Construction Codes ended the 20th century on a high note due to Henry's leadership. I found that he was generous with sharing the knowledge that management needed to do their jobs effectively. Management was mentored to achieve the high level of professionalism that is evident today. In doing this, he has set the tone for the 21st century; and I will do my level best to continue the legacy that has been passed on.

I also believe that it should be known that Beth Aben, now deputy director of the Bureau, provided excellent leadership during the time between Henry's departure and my appointment. Beth has come up through the ranks and always provided me with good advice as a manager and I trust that this will continue. In closing, I must say that I believe that the bureau has one of the best management teams and staff in state government. My success depends on the success of those I lead, as much as my ability.



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LABOR & ECONOMIC GROWTH
LANSING

KEITH W. COOLEY
DIRECTOR

NOTICE

2003 MICHIGAN UNIFORM ENERGY CODE TO TAKE IMMEDIATE EFFECT

In 2002, the Department of Labor & Economic Growth established a committee to review and update Michigan's Uniform Energy Code. After review and promulgation of the code, the Ingham County Circuit Court issued an injunction to halt the February 28, 2005, effective date of the rules. Therefore, the rules have been pending litigation since that time. On October 24, 2008, this matter was before the court with a decision following to dismiss the complaint and dissolve the injunction; thereby making the rules effective immediately.

Therefore, every unit of government enforcing the single state construction code must apply the 2003 Michigan Uniform Energy Code (MUEC) to newly issued permits.

The 2003 MUEC was distributed prior to the anticipated effective date of the rules; however, given the length of time that has passed, the bureau is placing a link to these rules on the web site, www.michigan.gov/bcc in order to download a free copy.

If you prefer the MUEC in the original format; you may purchase a copy at a cost of \$2.50 by downloading and completing the **Codes and Standards Order Form** and mailing it along with a check or money order made payable to "State of Michigan" to Michigan Department of Labor & Economic Growth, Bureau of Construction Codes, P.O. Box 30255, Lansing, Michigan 48909. Copies may also be purchased at the bureau's Okemos Office at 2501 Woodlake Circle, 1st Floor. Please call 517/241-9313 to check availability.

Technical questions regarding these rules may be addressed to the respective divisions as follows:

Plan Review Division	517/241-9328
Building Division	517/241-9317
Electrical Division	517/241-9320
Mechanical Division	517/241-9325
Plumbing Division	517/241-9330

Providing for Michigan's Safety in the Built Environment

BUREAU OF CONSTRUCTION CODES
P.O. BOX 30254 • LANSING, MICHIGAN 48909
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BOILER DIVISION

RESIDENTIAL BOILER INSTALLATIONS

By **Bill Vallance, Assistant Chief
Boiler Division**

In the Summer 2008 issue of “Code Works”, the Boiler Division’s article stated a mechanical license is required to install boilers in residences with less than six units.

Chapter 20 of the Michigan Residential Code, M2001.1.1, states in part that boilers shall be designed and constructed in accordance with the Michigan Boiler Code. The Michigan Boiler Code states in R 408.4025 that “boilers shall be constructed

in accordance with the boiler and pressure vessel code of the American Society of Mechanical Engineers (ASME).”

These boilers shall have a low water fuel cutoff, operating at high pressure and temperature limits. The Mechanical Code does not mention ASME CSD-1 requirements, thus manual resets on the above controls and emergency shutdown switches are not required.

Questions or concerns may be directed to the Boiler Division at (517) 241-9334.

ROBERT J. ABEN, JR. ELECTED CHAIRMAN OF THE BOARD OF TRUSTEES OF THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

By **LeeAnn Allaire, Departmental Analyst
Office of Management Services**



Michigan’s Chief Boiler Inspector, Robert J. Aben, Jr. was elected chairman of the National Board of Boiler and Pressure Vessel Inspectors (NBBPVI) on October 7, 2008. The NBBPVI is a global organization with its headquarters in Columbus, Ohio and is comprised of an elite group of 61 chief boiler inspectors from 45 states, four major cities, and 12 provinces.

Robert’s experience in the boiler and pressure vessel industry started in 1966, when he joined the United States Coast Guard and served until 1980. During his Coast Guard career, Robert served as engineer on several ship and shore units. From 1980-1989, he was an authorized inspector for

the Hartford Steam Boiler Inspection and Insurance Company where he provided third party oversight for hydrostatic testing, plant construction, quality control, and systems testing at Detroit Edison’s Fermi II Nuclear Plant. In 1989, Robert hired on as the assistant chief boiler inspector with the [Bureau of Construction Codes](#)’ Boiler Division. In 1990, he became the chief boiler inspector in the State of Michigan, where he remains today.

The history of Michigan’s boiler oversight is quite interesting. Most of this generation has been blessed with very few boiler accidents that resulted in injury or death. There have, however, been three accidents since 1989 that have resulted in approximately 15 deaths and countless injuries. The untold story lies in the many accidents that were prevented by the boiler inspection program enforced by Robert and his diligent staff. The [history of Michigan’s boiler program](#) can be viewed on the Bureau’s website.

Questions or concerns may be directed to the Boiler Division at (517) 241-9334.

BUILDING DIVISION

MANUFACTURED HOUSING GENERAL RULES

By **Larry Lehman, Chief**
Building Division

Amendments to the Manufactured Housing Commission General Rules went into effect September 2, 2008. The rules were updated to provide clarification to address industry and consumer concerns regarding construction and maintenance of manufactured housing communities. Also, as a result of Executive Order 2006-16, it was necessary to clarify the inspection responsibilities previously assigned to the Michigan Department of Environmental Quality (MDEQ). Rule amendments were also necessary to align with changes to the Mobile Home Commission Act, 1987 PA 96. Following are some of the more significant changes to the rules. This is not a complete list of all the changes and is only portion of the text from the rules. For a complete version of the rules, visit the Bureau's website at www.michigan.gov/bcc.

Community Construction

1. Allows for dead end and internal roads with any one of the configurations listed in the 2003 edition of the International Fire Code, Appendix D, Rule 920.
2. Existing communities licensed under prior codes:
 - A community constructed according to the standards in previous acts and rules for which a license was previously issued and valid at the time these rules or any subsequent amendments of these rules is not required to fulfill the current requirements for community construction in these rules (Rule 947a).
 - A community constructed according to the standards in previous acts, rules, or local ordinances shall be maintained or altered in a condition consistent with the standards in effect at the time of the original construction, including but not limited to spacing of homes, road widths, sizing, and design of community infrastructure with three exceptions (Rule 947).
3. Clarifies that the developer or owner must obtain building, electrical, mechanical, and plumbing permits when applicable (Rule 901(f)).

Water Meter Disclosures

1. Still required at time of installation but are not required in the Community Rules.
2. Requires a written consumer notice of rates, charges, fees, installation and shut-off procedures, to be provided to each current resident not less than 30 days before providing water for which an invoice is rendered following meter installation.
3. Rule 1006 (a) has been revised to require only a state approved proper functioning heat tape that is maintained for one year.

Regulatory

1. License, fee and continuing education changes made to accommodate a three year license (Rule 214i(3)).
2. Installer servicers shall complete 12-hours of department approved continuing education throughout the licensing cycle (Rule 213).
3. Resident handbook is available online but still needs to be disclosed at the time of home sale or site rental (Rule 1005a).
4. Eliminates retailer license requirements for communities that sell abandoned homes obtained without compensation, similar to banks selling repossessions (Rule 101(bb)).
5. Changes dealer Surety Bonds to a maximum of \$100,000 for all locations (Rule 214f).

MDEQ Rules

Transfers annual inspections, Certificate of Compliance and Community Maintenance Rules authority from MDEQ to Department of Labor & Economic Growth that was initiated under the governor's Executive Order, 2006-16m (Rules 701 through 720).

Questions related to this article may be directed to the Building Division at (517) 241-9317.

ELECTRICAL DIVISION

2008 CODE ADVISORY COMMITTEE, REGISTRATION & RENEWALS

By **Dan O'Donnell, Chief**

Electrical Division

The 2008 Electrical Code Adoption Advisory Committee meetings have concluded. The process included a review of 2008 National Electrical Code and the Michigan Part 8 Code Rules. Our thanks go out to the committee for their dedication and commitment in helping us with this process. The code adoption process will now move forward through the legislative process.

Just a reminder that effective September 1, 2008, all apprentice electricians must be registered with the Bureau of Construction Codes, Electrical Division to accumulate time towards the State of Michigan journeyman electrician examination. In addition, it is a violation of Public Act 217 for a person to perform electrical work in the State of Michigan without being properly licensed or registered.

2009 master and journey electrician, fire alarm specialty technician and sign specialist license renewals will be going out soon. You must have a completed and approved 2005 code update course and that information must be on file with the Electrical Division in order to process your 2009 license renewal. Hopefully everyone has been proactive and completed their 2005 code update course. A special thank you to Bill Fox, BCC Electrical Inspector, Dave Williams, Delta Township Inspector, and Larry Lehman, Chief BCC Building Division who along with yours truly, provided Act 54 programs for the October training held by the BCC Electrical Division at Higgins Lake. Tell a friend about the BCC website at www.michigan.gov/bcc and make safety your first priority.

Questions can be directed to the Electrical Division at (517) 241-9320.

NATIONAL ELECTRICAL CODE 210.5 CODE CHANGE

By **William F. Fox, Electrical Inspector**

Electrical Division

There is a new sub-section, (C), added to 210.5 that when implemented and enforced will benefit not only the installers but any electrician in the future who may be making alterations to the structure's wiring system.

The main thrust of this section was re-located from 210.4(D), and rightfully so. Those in the trade have known for years the requirements for identifying branch circuit conductors by their system. For example, the Joint Industrial Committee (JIC) standards have said to identify the 120/208V circuit conductors Black, Red, Blue and the 277/480V circuit conductors Brown, Orange, Yellow, and although, this National Electrical Code section does not require these markings, it does require an identification system. This section states, "Where the premises wiring system has branch circuits supplied from more than one nominal voltage system, each ungrounded conductor of a branch circuit, where accessible,

shall be identified by system. The means of identification shall be permitted to be by separate color coding, marking tape, tagging, or other approved means..."

It has been common practice to stop at that point when reading this code section. If stopped there, a very important part of the identification system is left out as the section further identifies the system used "...shall be permanently posted at each branch-circuit panelboard or similar branch-circuit distribution equipment".

In conclusion, if the 120/208V system is marked Black, Red, Blue and the 277/480V is marked Brown, Orange, Yellow, each corresponding identification system used shall be posted on the branch circuit panels.

Questions can be directed to the Electrical Division at (517) 241-9320.

ELEVATOR SAFETY DIVISION

ELEVATORS WITH MACHINERY IN THE HOISTWAY

By Cal Rogler, Chief
Elevator Safety Division

The elevator industry is currently designing and manufacturing traction elevators which have the elevator machine located within the hoistway. In most cases, this reduces the size of the room outside the hoistway necessary to protect the rest of the elevator equipment.

In the past, the elevator machine room usually contained the elevator hoist motor, the elevator controller the floor selector and, on most occasions, the motor generator set. New elevator designs and advancements have eliminated the need for motor generators, and a majority of the time, eliminate the stand alone floor selection devices as well. New technology has resulted in a reduction in the physical size of the hoist machine. These new designs have allowed the hoist machine to be moved from a separate machine room into the hoistway. The changes, as well as modifications to the controller, have reduced the size of the room necessary for the other elevator equipment. In most cases, the size of the room necessary has been reduced to about the size of a large broom closet.

Altogether, this has nearly eliminated the little house, which contained the elevator equipment, that used to stick up above the rest of the building roof. The new type of equipment permits architects to design buildings with a clean roof top, without any little houses.

The elevator machines located inside the hoistway may be found at the top of the hoistway just below the roof top, or located at the bottom of the hoistway secured to the pit floor. In one particular design, the hoist machine is located inside the hoistway and attached to the elevator guide rail on one side with the machine located just above the top floor landing. In this design, the elevator car actually sits next to the elevator machine when it is at the top landing. These advancements have resulted in new designs for buildings with regards to roof tops and internal room configurations.

If you have questions or concerns with regards to an elevator, please contact the Elevator Safety Division at (517) 241-9337.

OFFICE OF LOCAL GOVERNMENT AND CONSUMER SERVICES

CONTINUING EDUCATION FOR CODE OFFICIALS

By Scott D. Fisher, Director

Office of Local Government & Consumer Services (OLGCS)

Credit statements for completed continuing education programs were sent to all code officials in August of this year. If you have not already done so, I encourage you to carefully review your credit statement to assure that all the courses you have completed are accurately recorded. It is your responsibility to maintain a record of the classes you have attended and the number of credit hours you have obtained in each category to become reregistered in September 2009.

You will receive one more credit statement during this registration cycle in June 2009. Due to budget restraints, the Bureau will no longer be providing two credit statements each year of the registration cycle. In the future, you will receive a credit statement in the second year of the cycle and another in June, just prior to the end of the cycle.

Should you fail to complete your education hours and/or submit your renewal application timely, you will be required

to complete all educational requirements not yet achieved and submit a new application for provisional registration to meet the requirements of the Building Official, Plan Reviewers, and Inspector Registration Rules. Failure to qualify a new application will result in the denial of the application.

As you are aware, failure to renew your registration, for any reason, prohibits you from performing work on behalf of local governmental subdivisions.

If you have any questions about your education record, or believe there is an error on your credit statement, please provide the program approval number, program title, and date of attendance, on the **Continuing Education Worksheet** that was included with your credit statement, as well as any other information you feel is relevant, to this office.

If you are a registered code official and have not received a credit statement, please contact OLGCS at (517) 241-9347. A list of continuing education programs is available on our website at www.michigan.gov/bcc.

OFFICE OF LAND SURVEY AND REMONUMENTATION

ORIGINAL ROOTS OF THE STATE SURVEY AND REMONUMENTATION PROGRAM AND THE CHALLENGES OF SURVEYING NEAR WATER

By Keith Lambert, Director

Office of Land Survey & Remonumentation (OLS&R)

On March 2, 1784, a select committee chaired by Thomas Jefferson was appointed by the U.S. Continental Congress to devise and report the most eligible means of disposing of the western lands, which was the area west of the Appalachian Mountains that would be ceded by the original 13 states to the federal government.

The land area lying north of the Ohio River between the Mississippi River and the west boundary of Pennsylvania became known as the Northwest Territory. Congress decided to sell this territory, and the committee was charged with developing a plan for land sales. The three major goals of the land sales were to: 1) raise funds with which to operate the new federal government; 2) pay off the debt of the military service; and 3) provide an orderly plan for settlement of the “West”.

Jefferson supported a rectangular system to prevent the common problems inherent in metes and bounds systems of the colonies. The plan enacted by the Continental Congress on May 20, 1785, to dispose of the land became known as the “Land Ordinance of 1785”. It created the Rectangular or Public Land Survey System (PLSS), which would cover all of the U.S. except the original colonies and Texas. Although never part of any statutes enacted about the PLSS, federal policy has always been that the public lands had to be surveyed before being patented (deeded to settlers).

The Northwest Ordinance was enacted by Congress on July 13, 1787, providing for the government of the territory. In the following years, many experimental systems, policies and procedures were adopted and utilized in the state of Ohio. Two of the most important Acts were established in 1796 and 1805. The Act of May 18, 1796, set up the basic system of rectangular systems which is still followed to this day. The Act of February 11, 1805, stopped controversies over the locations established and field measurements made in the surveys performed by the deputy surveyors. This statute settled the following: (1) positions of section corners as set are without error; (2) section lines are fixed as surveyed; and (3) sections contain the area (acreage) as returned by the surveyor general.

A number of experienced surveyors developed in Ohio would be contracted to do nearly all of the first surveys in Michigan, leading to complaints by Michigan surveyors when the public land surveys began in 1815. The Treaty of Detroit was signed in 1807 opening the door for development. The survey of the already existing Private Claims (lands owned by the original French settlers) began in 1807 and finished in 1808.

In July 1815, U.S. Surveyor General Edward Tiffin issued a written set of instructions which were utilized for early surveying activity in Southern Michigan. Coincidentally and unfortunately, 1815 was a year of extensive flooding in the upper Midwest. Later that year Tiffin wrote the General Land Office (GLO) Commissioner about the dire situation in Michigan and asked to abandon the survey. Tiffin reported that many of the lakes have extensive marshes adjoining the margins and are uniformly covered from six inches to three feet of water and that nearly one half of the country lying between the swamps and lakes was poor land unfit for vegetation. He stated that if the government’s wish was that the soldiers should have lands fit for cultivation (as the Act of Congress expresses) that the whole two million acres appropriated in the Territory of Michigan will not be worth the expense of surveying. The survey in Michigan was never abandoned and bodies of water were obstacles that the early surveyors had to overcome.

Michigan was surveyed under three general sets of instructions from the U.S. Surveyor General, in 1815 and 1833 as a territory, and in 1850 as a state. There are also numerous special instructions in addition to these general instructions as the work of surveying the public lands progressed throughout Michigan.

Initially, rivers and ponds were addressed in the Private Claims instructions issued to Aaron Greeley on January 30, 1808. These instructions required posts or corners to be established where the lines of the survey are terminated by all navigable rivers. Whenever insuperable obstacles such as ponds, swamps, rivers, creeks, etc. are encountered, necessary offsets or work by traverse or trigonometry will be used in determining the length and position of any part of a line not actually run.

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The 1815 general instructions directed the surveyors in meandering rivers to determine the calculations of the contents of the fractions of sections to be returned on the plats; but the quantity of contents of a whole section were only to be put down in all other sections. Posts are to be well driven into the ground and must be at least three inches in diameter and rise not less than three feet. The posts are to be perpetuated with courses and distances measured to two or more adjacent trees (bearing trees).

In 1824, a set of special instructions ordered the surveyors to set posts on the margins of every considerable lake which your lines cross, which may be surrounded by saleable land.

The 1833 general instructions provided additional direction concerning bodies of water. Surveyors were to use whatever method necessary to pass inaccessible parts of lines such as swamps, marshes, lakes, rivers or other objects over which you cannot pass, the utmost accuracy is necessary to obtain the true measure of the lines. The distances to the posts which will be established on the banks of rivers, lakes or bayous and which are to be meandered are to be taken with great accuracy. Where bearing trees cannot be had, the places of the posts are to be perpetuated with mounds of earth. Wherever the section or township lines intersect lakes, streams of water or islands which are to be meandered, posts are to be established on the margin or banks thereof at the points where the lines intersect or leave them. The true location of such lakes is necessary in order to calculate the contents of the subdivision of such sections. Surveyors were required to report in their field notes all offsets or methods of whatever kind by which they calculated the measurement or distance on any line which could not be run in the field.

A printed specimen of the field notes accompanies the 1833 instructions which served to illustrate both the order and method of performing the surveys and the most approved form of keeping the field notes. Three examples of this specimen concerning bodies of water are generalized as follows: (1) set quarter section post in swamp, water two feet deep, and two bearing trees listed; (2) corner of sections in river, inaccessible, no post set and no witnesses listed; and (3) intersected margin of lake and set post, two bearing trees listed, offset line. None of the specimen examples ever noted setting a post in a sizeable body of water or navigable stream.

The 1850 general instructions expanded on the field note requirements to report at what distance you enter and at what distance you leave every lake, bay, pond and creek. As the surveys progressed through Michigan so did the instructions on dealing with bodies of water.

Fast forward roughly 175 years from when the original surveys began and Michigan enacts a law to help restore, preserve and maintain the original corners established by the GLO. The State Survey and Remonumentation statutory authority is 1990 PA 345, MCL 54.261 et seq. This act mandates the monumentation or remonumentation of property controlling corners established by the PLSS under the guidelines of the manual of instructions for the survey of public lands of the United States, 1973, prepared by the Bureau of Land Management (BLM) of the Department of the Interior, Technical Bulletin 6, or subsequent editions.

Since 1993, Michigan counties have contracted professional surveyors to restore and preserve the original government survey corners pursuant to 1990 PA 345. Some of these surveyors have filed Land Corner Recordation Certificates (LCRC) professing to define corners in naturally occurring lakes, rivers and ponds where according to the GLO surveys, no posts were set. The Office of Land Survey and Remonumentation (OLSR) has corresponded with all of the 83 counties requesting that they not file LCRC's reporting to define corners in natural waters not marked by the GLO survey.

Along with the before mentioned GLO instructions, the following information must also be taken into consideration by both the counties and contracted professional surveyors when performing surveys near bodies of water under the State Survey and Remonumentation Program.

Surveyors were compensated on a per mile basis under the contracts established by the GLO. This contract system encouraged the surveyors to use the easiest surveying methods available to produce the results needed. Hence, much of Michigan's section and township lines were run in the summer, and the meandering of lakes was done in the winter when ice made meandering simple. Therefore notes exist that cite posts set in ice to account for the surveying method used.

Both state and federal courts have repeatedly held that plats and field notes referred to in patents may be resorted to for

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the purposes of determining the limits of the area that passed under such patents. "It is a well settled principle that when lands are granted according to an official plat of survey of such lands, the plat, itself, with all its notes, lines, descriptions and landmarks, becomes as much a part of the grant or deed by which they were conveyed, and controls so far as limits are concerned, as if such descriptive features were written upon the face of the deed or the grant itself."

General surveying principles adhere to the fact that grants of the government for lands bounded on streams and other waters without any reservation or restriction of terms are to be construed as to their effect according to the law of the state in which the lands lie. Michigan takes title of submerged lands from the United States by virtue of admittance to the union as a state. It acquires ownership of those lands in the same manner as the original colonies at that instant. Michigan, as owner, determines the extent of private/public interests in those submerged land by decision of the Michigan Supreme Court.

According to the BLM, the application of any rule, when surveying private lands, should, of course, be brought in harmony with State law; furthermore, the BLM has no authority to issue instructions on the reestablishment of lost corners of the original surveys where the lands have passed into private ownership.

Section 3-76 of the Manual of Surveying Instructions of 1973 state, "The BLM assumes no control or direction over the acts of local and county surveyors in the matters of subdivisions of sections and reestablishment of lost corners of original surveys where the land have passed

into private ownership, nor will it issue instructions in such cases. The bureau desires that the rules controlling the acts of its own cadastral surveying service be considered by all other surveyors as merely advisory and explanatory of the principles which should prevail in performing such duties."

Any apparent discrepancies appearing in the original notes for the survey or on the plat of the survey will be found to comply with some requirement of the special instructions or with an earlier set of general instructions or will be an exception introduced by the deputy surveyor as his own idea. Each case must be considered on its own evidence. Clearly, no general rule can be laid down as to when unusual procedures might be adopted, and the burden of proof must lie on any surveyor who departs from the regular methods.

The OLSR concludes that the meanders of lakes and rivers in the GLO survey are for the purpose of segregating the uplands from the bottomlands and for ascertaining the quantities of land to be patented for sale. The GLO corners are established by planting the posts in the ground and perpetuating the posts with witnesses per both the general and special instructions. The GLO surveyor reporting the theoretical position of a corner in water is simply justification of not establishing the corner, not planting the post, for determining the length of lines not actually run and for compensation purposes per the instructions.

In summation, establishing a corner in naturally occurring water is normally a private survey matter which is not part of the Survey and Remonumentation Program.

Questions can be directed to OLSR at (517) 241-6321.

BOARD AND COMMISSION MEETINGS

<u>Meeting</u>	<u>Date</u>	<u>Time</u>	<u>Location</u>
Barrier Free Design Board	Jan 9	9:30 am	Okemos – Conf Room 3
Board of Boiler Rules	Dec 9	9:30 am	Okemos – Conf Room 3
Construction Code Commission	Jan 9	1:00 pm	Okemos – Conf Room 3
Electrical Administrative Board	Dec 5	9:30 am	Okemos – Conf Room 3
Elevator Safety Board	Jan 23	9:30 am	Okemos – Conf Room 3
Manufactured Housing Commission	Dec 10	10:00 am	Okemos – Conf Room 3
Board of Mechanical Rules	Jan 21	9:00 am	Okemos – Conf Room 3
State Boundary Commission	Dec 11 & Jan 15	1:30 pm	Okemos – Conf Room 3
State Plumbing Board	Dec 16	10:00 am	Okemos – Conf Room 1

PLUMBING DIVISION

PLUMBING PRODUCT ACCEPTANCE

By Robert Konyndyk, Chief
Plumbing Division

This article reviews the Bureau of Construction Codes (BCC) methods for accepting plumbing products in the field. There are several methods which provide product acceptance according to the code and laws which govern construction in the state of Michigan.

First, the Michigan Plumbing Code (MPC), Section 102.8, Referenced codes and standards, provides acceptance for those products which conform to the standards contained in the plumbing code. These products shall of course meet the third party testing and certification of Table 303.4. Plumbing inspectors unfamiliar or questioning a product's conformance to a standard should request and evaluate a full test report from an acceptable testing agency to assure compliance for the product. This is where the plumbing code stands out in that we do not rely on acceptance based upon the manufacturer's recommendation, but rely on the consensus published standards. Plumbing manufacturers deserve much of the credit here as they have participated in standards development at significant costs with their competitors to develop national consensus standards for product performance.

Second, the MPC, Section 105, Approval provides acceptance for products and methods not specifically addressed in the code in two manners. The first consideration is classified as modifications. This concept allows the code official latitude with recorded documentation in areas generally thought of as being very minor in nature. The inspector's liability issues for themselves and their enforcing jurisdiction are great. The second consideration is Alternative materials, methods and equipment best considered as Alternative Engineered Design. This acceptance is for products and methods which are at least equivalent to those contained in the code and substantiated by required tests and detailed documentation. The methodology, testing, documentation, and criteria issues are outlined in the code. While the liability issues are lessened and a paper trail is established, an independent decision is still required.

Third, the bureau's acceptance method for non standard compliance is Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230 (Construction Code Act), Section 21, Petition for approval of materials, product and methods; testing and evaluation; certificate of acceptability provides an acceptance method commonly called Product Approvals (PA). These formal processes are administered through open hearings and begin at the respective divisions within BCC. Division chiefs are responsible for oversight and processing

which leads to the various boards making recommendations to the Construction Code Commission (CCC). The CCC may attach conditions and is the final authority in granting the requests for Certificates of Acceptance. This is often used for new products which may not have the benefit of developed standards or products for example health care bathing tubs. These bathing tubs often used for burn patient care can be very complicated with several different functions. The Michigan State Plumbing Board who makes recommendations to the CCC has attached several conditions to these products to assure acceptable water supply protection.

Fourth, a newly enhanced acceptance method which involves a combination of other processes is guided by the International Code Council (ICC), Evaluation Service (ES) – PMG Listing process. PMG is the acronym for Plumbing, Mechanical, and Gas (Fuel Gas) disciplines. The ES of ICC has 70 years of combined excellence in addressing building products and more recently assisting code officials by providing testing documentation for products and methods in all disciplines. The new product listing service provides assurance that the PMG products and/or methods meet appropriate criteria, has been tested by acceptable agencies, and will continue to be manufactured in certification programs. In addition to certifying PMG products as code compliant, the listing program will assure conformance consistency with the International Codes and other model codes. Detailed information on the program and its product listings can be obtained by visiting their website at www.icc-es-pmg.org. It is anticipated that the Plumbing Division will be utilizing this process to a greater extent.

Questions may be directed to the Plumbing Division at (517) 241-9330.



MECHANICAL DIVISION

FIRE SUPPRESSION SYSTEMS - REVIEW/INSPECT

**By Tennison Barry, Chief
Mechanical Division**

It has come to my attention there is some confusion regarding the plan review and inspection of fire suppression systems. Specifically, who can perform plan reviews for fire suppression projects, and who can inspect fire suppression projects? For this discussion, it is important that we think of the fire suppression system in the context of how it's installed and the codes used in the installation.

In order to qualify to review fire suppression plans, the individual must meet the requirements of Section 5 of 1986 PA 54, Rule 49 which reads as follows:

Plan Reviewer - Rule 49. Qualifications.

An applicant for registration as a provisional plan reviewer shall comply with any of the following provisions:

- (a) Have four years of experience in the general building construction field as a building contractor, as a person responsibly in charge of building construction, or as a skilled worker.
- (b) Have successfully completed a recognized curriculum at an institution of higher education in architecture or engineering and have two years of practical experience in the construction trades.
- (c) Possess one of the following:
 - (i) Licensure in the electrical trade.
 - (ii) Four years of experience in one or more of the work classifications defined in Act No. 192 of the Public Acts of 1984, as amended, being §338.971 et seq. of the Michigan Compiled Laws, and known as the Forbes mechanical

contractors act. Two of the four years of experience shall have been at the journey level or at a higher level.

(iii) Licensure in the plumbing trade.

Anyone registered as a plan reviewer may review fire suppression plans.

Regarding Inspections: Inspections must be performed by an individual who has been approved by the Bureau of Construction Codes to perform mechanical inspections. The rules of qualification are as follows:

Mechanical Inspector - Rule 43.

An applicant for registration as a provisional mechanical inspector shall have four years of experience in either the work classification of heating ventilation and air conditioning (HVAC) or hydronic heating and process piping or a combination of experience in both classifications defined in 1984 PA 192, MCL 338.971 et seq. and known as the Forbes Mechanical Contractors Act. Two of the four years of experience shall have been at the journey level or at a higher level.

The only individuals that can inspect the construction aspects of a fire suppression system are individuals registered and approved by the Bureau of Construction Codes.

If you have any questions, you may contact me in the Mechanical Division at (517) 241-9325.

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
Building Division (517) 241-9317
Electrical Division (517) 241-9320
Elevator Safety Division (517) 241-9337
Mechanical Division (517) 241-9325
Office of Local Government & Consumer Services (517) 241-9347
Office of Land Survey & Remonumentation (517) 241-6321
(includes State Boundary Commission)
Plan Review Division (517) 241-9328
Plumbing Division (517) 241-9330

Facsimile Numbers:

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

Mailing Addresses:

P.O. Box 30254 (Codes: general correspondence)
P.O. Box 30255 (Codes: permits, licenses, and other documents
containing payment)
P.O. Box 30704 (Office of Land Survey & Remonumentation)
Lansing, Michigan 48909

PLAN REVIEW DIVISION

PREMANUFACTURED UNITS UPDATES FOR CODE CHANGES

By Todd Cordill, Assistant Chief

Plan Review Division

On August 1, 2008 the Michigan Building, Residential, and Rehabilitation Codes became effective. Updates of premanufactured unit building systems for the new code will be required in 2009 as this has not been required by the bureau since 1995. Manufacturers are authorized to continue to build systems or units approved in 1995 or later with the stipulation that building systems or units be manufactured in compliance with current codes and have a Building System Approval Report (BSAR) and corresponding approved plan approved in 1995 or later.

Manufacturers will be notified when to submit updates to their approved building systems in early 2009. The update of system manuals will occur first, followed by individual building systems or unit updates. In the interim period, manufacturers can produce building systems or units in compliance with current codes using the document entitled "Certification of Premanufactured Unit Compliance." The document shall be:

- Signed by an authorized representative of the manufacturer

for each approved building system that is manufactured.

- Used by the manufacturer and recognized by the enforcing agency that issues permits for the installation of premanufactured units and construction of associated foundation systems.
- Used by the manufacturer and recognized by the enforcing agency that issues permits for the installation of premanufactured units, and is an integral part of the building system approval documents for plan review and permit applications.

Starting in 2009, notices will be distributed to manufacturers and posted on the bureau website explaining the required update process and schedule. Compliance shall be demonstrated for the 2006 Michigan residential, building, mechanical, and plumbing codes, as well as the current Michigan Electrical Code.

Questions may be directed to the Plan Review Division at (517) 241-9328.

NOTICE TO PREMANUFACTURERS AND INSPECTION AGENCIES

In order to facilitate the use of existing approved building systems enclosed herein is a document entitled "Certification of Premanufactured Unit Compliance". This document is provided for your use with existing approved building systems. The purpose of this document is to minimize confusion with construction code enforcing agencies throughout the state of Michigan regarding the approval status of your approved building systems.

The enclosed document shall be filled out by the manufacturer and provided to customers with each Building System Approval Report and approved premanufactured unit plans. Up to date information is also provided on our bureau website at www.michigan.gov/bcc.

Questions regarding this notice may be directed to the Plan Review Division at 517/241-9328.



STATE OF MICHIGAN

DEPARTMENT OF LABOR & ECONOMIC GROWTH
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

KEITH W. COOLEY
DIRECTOR

Certification of Premanufactured Unit Compliance

The Bureau of Construction Codes will be updating the building systems of approved premanufacturers after the adoption of the 2006 Michigan Building, Residential and Rehabilitation Codes. It is anticipated that the process will start early in 2009. Manufacturers will be notified when to submit their updates.

In the interim period manufacturers are authorized to continue to build approved systems with the stipulation that they be constructed in accordance with the Michigan Construction Code adoptions listed below. This authorization shall apply to Building System Approval Reports (BSAR) dated 1995 or later. Each such BSAR shall be accompanied by this document with the bottom section executed by the manufacturer.

Sincerely,

Todd Cordill, NCARB
Assistant Chief, Plan Review Division

July 31, 2008

I, _____, an authorized representative of
_____ hereby certified that building system
approval _____ is constructed in accordance with

- 2006 Michigan Building Code
- 2006 Michigan Mechanical Code
- 2006 Michigan Plumbing Code
- 2005 Michigan Electrical Code
- 2006 Michigan Residential Code (If this box is checked other boxes shall not be checked)

In Testimony of the above I sign,

Signature

Date

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Providing for Michigan's Safety in the Built Environment

BUREAU OF CONSTRUCTION CODES
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www.michigan.gov

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BCC QUICK LINKS

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[Online License Renewals](#)
[Codes & Standards Order Form](#)
[Statewide Jurisdiction List](#)
[Local School Construction Enforcement List](#)
[Product Approvals](#)

CIVIL SERVICE WEBSITE

[State Job Postings](#)

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Editor in Chief
Beth Hunter Aben

Editor
Tracie Pack

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LICENSE EXAMINATION DATES

<u>Examination</u>	<u>Date</u>	<u>Location</u>	<u>Deadline</u>
Boiler Installer and Repairer	Dec 3, 4	Lansing	Nov 7
Boiler National Board	Dec 3, 4	Lansing	Nov 7
Electrical/Fire Alarm/Sign Contractor	Nov 19 Jan 20	Okemos Okemos	Oct 20 Dec 18
Fire Alarm Spec. Tech./Sign Spec.	Nov 18	Okemos	Oct 21
Elevator Journeyperson	Nov 25 Jan 13	Okemos Okemos	Nov 4 Dec 23
Elevator Contractor/Cert. of Comp.	Jan 23	Okemos	Jan 2
Mechanical Contractor	Dec 16	Lansing	Nov 14
Plumbing - Contractor	Dec 10	East Lansing	
Plumbing - Master and Journey	Dec 17	East Lansing	

Dates and times are subject to change. Visit the BCC website for updates.

PROVIDING FOR MICHIGAN'S SAFETY IN THE BUILT ENVIRONMENT



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