



BULLETIN

DIRECTOR'S COLUMN

Henry L. Green

Fire Inspection Under the Construction Codes

Over the past several months, I have been asked a number of times whether or not fire inspectors may perform inspections of fire safety systems under the construction codes. I have stressed the need for coordination and consistency in the inspection of building systems including fire safety systems. Rather than answer this question, we should examine the need for coordination between building inspection departments and fire service agencies.

The codes provide minimum requirements for occupant safety that are inclusive of protections of building elements based on resistance to fire in terms of minutes and hours. The rating requirements are largely based on the premise of providing time for emergency egress from a building. The use of fire suppression systems are intended to improve or sustain the protection of occupants and the added protection to building elements that may be subject to a fire.

To ensure these systems respond as intended, inspections must be conducted to determine system compliance with the applicable standards. The coordination of inspection of these systems is vital to the success of the fire protection package of a building and ultimately have a significant role in responding to emergencies. It is a necessity that these systems be designed and installed

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Combining Electrical/Fire Alarm Contractor Licensure with Act 144 Certification

*by Stella Morris, Chief
Electrical Division*

In March of this year, Governor Granholm announced the merger of the Office of Fire Safety with the Bureau of Construction Codes, creating the Bureau of Construction Codes and Fire Safety (BCCFS). With this merger, the department is reviewing duplicative processes and/or regulations and revising where appropriate.

One such process being reviewed is the method of renewing the electrical/fire alarm licenses and Act 144 certifications. PA 217 of 1956 contains specific experience and licensure requirements for licensing electrical/fire alarm contractors. PA 207 of 1941 contains requirements for certification for the design and/or documentation of fire alarm systems in certain regulated facilities (schools, colleges and universities, dormitories, state-owned or leased buildings, hospitals, nursing homes, homes for the aged, adult foster care homes, and penal facilities). Many firms currently licensed as Electrical/Fire Alarm Contractors are also certified by the Office of Fire Safety.

In an effort to simplify the process, when renewing your electrical/fire alarm contractor license, the BCCFS will combine your license with your certification and will indicate both on your license. This will result in having one renewal process, one expiration date, and one agency contact for all licensing/certification requirements. We believe this change will result in more efficient service to our customers.

If you have questions regarding this revised procedure, please contact the Electrical Division at 517/241-9320.

Plumbing Permit Changes

*by Robert G. Konyndyk, Chief
Plumbing Division*

The State Plumbing Act, 2002 PA 733 (the Act) with its many changes has affected permit forms.

The concept of having the business owner (plumbing contractor) and master jointly and individually responsible is now identified on the bureau's permit application. The new application, BCC-327 (Rev. 6/03) now has contractor and master identification areas in Section II to be identified. Contractor information will be required after the grandfathering deadline the October 1. The exception will be where a master plumber and business have filed an affidavit, often called a factory affidavit, that was discussed in the last issue of the Bulletin.

The permit application is also changed in Section IV, Type of Job. Item 3 now only requires review for commercial buildings having 12 or more required fixtures. Further changes in this area now identify the plan review submission number when applicable.

The fee chart in Section VIII now identifies domestic water treatment installations, number 3 - 25 and Medical Gas Systems in number 26. Section 15 (2) of the Act addresses treatment and filter devices.

Local jurisdictions issuing permits and performing inspections are encouraged to adapt the bureau application for their use. The application similarity will benefit contractors throughout the state with greater uniformity. The permit application is found under Forms on the Bureau web site at www.michigan.gov/bccfs.



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Director's Column, continued...

as provided by the respective standards. Building owners, operators, and emergency response personnel all need to know how these systems are installed, their predetermined response and the annual maintenance requirements. These elements are paramount in ensuring the safety of building occupants and fire fighters as well.

Fire Departments and Building Departments must work together and coordinate their efforts to achieve a comprehensive coordinated inspection process and the ongoing service of fire safety systems. The belief is reflected in the coordinated activities of the Bureau of Construction Codes and Fire Safety. Our efforts focus on a program that will provide a systematic approach to coordinated inspections including both fire inspectors and construction code inspectors.

These coordinated inspections should result in improved compliance, elimination of duplicative services, and improved response to building owners and contractors.

Focusing on this coordination effort is the response to who should be conducting inspections. Not who, but rather how inspections are provided is the more important issue.

Act 144 of 1982

by Dan Dykstra
Office of Fire Safety

Public Act (PA) 144 of 1982 amended PA 207 (the Fire Prevention Code) to require the certification of firms that install, modify, or document the installation or modification of a required fire suppression system, or document the installation or modification of a required fire alarm system in facilities regulated under PA 207. The requirements for certification also apply to firms that perform testing, inspection, maintenance, or design of such systems in these facilities. Facilities regulated under PA 207 include:

- Health Care Facilities; including Hospitals, Nursing Homes and Homes for the Aged.
- Adult Foster Care Facilities (7 beds or more)
- Schools K-12, Colleges, Universities and Dormitories
- State Correctional Facilities and City/County Jails

Currently, there are 375 firms approved for a 3-year certification. Act 144 requires the certified firm take legal responsibility for documentation of the system installation, assuring that the system is in compliance with all applicable codes, rules, and laws. Certified firms are also required to document and maintain complete records of the work performed on these systems for inspection by Bureau of Construction Code and Fire Safety (BCCFS) staff.

PA 144 also gives BCCFS the ability to take action against a certified firm that does not comply with all applicable requirements. The majority of complaints received involve missing or incomplete documentation. However, there have been instances of negligence involving the installation of the required system(s), and in some cases, the firm may have its certification suspended by BCCFS, pending a hearing by the State Fire Safety Board.

It is important to note that in addition to being certified under PA 144, firms that install fire alarm or fire suppression systems in any facility in Michigan are required to be licensed contractors under the Electrical Administrative Act, PA 217 of 1956 and/or the Forbes Mechanical Contractors Act, PA 192 of 1984 respectively. In addition to state licensure, PA 144 provides an additional level of safety in these "critical care" facilities under the authority of PA 207 by ensuring that these systems are

installed, modified, maintained, and documented by technically qualified individuals.

Questions may be directed to Becky Brimley at 517/322-6200.

Limited Liability Companies as Plat Proprietors

by Maynard R. Dyer, Director
Office of Land Survey and Remonumentation

Landowners continue to utilize limited liability companies (LLCs) to be the proprietor of new subdivision developments. Just who may sign on the plat or operate the LLC is often difficult to determine. LLCs come in two varieties, those managed by members and those managed by managers. To complicate matters a bit further, there is also a sole member LLC. Members and managers can change by a simple vote of the other members. A current list of all members of the LLC is required to be maintained at the address identified on the LLC document on file with the Michigan Department of Consumer and Industry Services. The filed document specifies if all members or if only a manager may operate the LLC. Operating agreements are also required, except in the case of a sole member LLC, to specify how the LLC is managed (by members or by managers) and often identify the members and managers, if any. LLCs may also create an authorized agent to sign on its behalf. This discussion is not intended to address all of the possibilities or the variety of choices that LLCs may make in the management and operation of their company.

Subdivision plats submitted for approval that have a LLC as proprietor need to include a copy of the filed LLC certificate, a list of the current members, and a copy of the LLC's operating agreement with the plat to confirm the proper party has signed the plat.

Questions may be directed to the Office of Land Survey and Remonumentation at 517/241-6321. Please note this is a new telephone number.

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**Providing for
Michigan's Safety
in the Built Environment**

Boiler Piping

by Robert J. Aben, Jr., Chief
Boiler Division

To understand the subject we need to know how boiler systems are categorized under the boiler law and rules.

The American Society of Mechanical Engineers Boiler and Pressure Vessel Code is adopted by reference in the following rules; R 408.4025, 408.4027, 408.4031 and 408.4032. This standard groups the parts of a boiler system into three areas. 1. The boiler proper, which is out to the first connection off the boiler. 2. Boiler external piping, which is from the boiler to the first or second valve required by the code. 3. Non-boiler external piping, which is all piping beyond the first or second valve. (See ASME Code Section I Preamble for more detail.)

The piping systems discussed above are those associated with power boilers and high pressure, high temperature hot water boilers. Power boilers are those designed to operate at a pressure above 15 psi for steam or 160 psi or 250° F for hot water. The installation, repair or replacement of boilers and external piping seldom create questions regarding licensing requirements. However, the third area, **non-boiler external piping**, continues to be disregarded, overlooked, or misunderstood.

Boiler rule, R 408.4032, states that non-boiler external piping must be installed in accordance with ASME code B31.1 and it identifies four piping systems that must be installed to this code. 1. Blow-down piping beyond the second valve and out to the safe point of discharge. 2. Steam piping out to the load, (this includes high pressure high temperature hot water). 3. Feed water piping from the pump to the boiler. 4. Condensate piping.

Boiler rule, R 408.4033, identifies the permit requirements and states in paragraph (a) A person shall not install, reinstall, alter, or repair a boiler without holding a proper license and first securing a permit . . . and paragraph (b) A person shall not install, repair, or replace welded pipe without holding a proper license and first securing a permit . . . and paragraph (c) A person shall not

Scheduled Board Meetings

MEETING	DATE	TIME	LOCATION
State Plumbing Board	December 2	10:00 a.m.	Okemos-Conf. Room 2
Electrical Administrative Board	December 5	9:30 a.m.	Okemos-Conf. Room 1
Board of Boiler Rules	December 9	9:30 a.m.	Okemos-Conf. Room 1
Manufactured Housing Commission	December 17	10:00 a.m.	Okemos-Conf. Room 3

Okemos - 2501 Woodlake Circle, Okemos

License Exam Schedule

Please Note: Examination schedules for 2004 have not been finalized. Please contact the respective division or refer to the bureau's website (www.michigan.gov/bccfs) in December to obtain examination dates and locations.

install, repair, or replace non-welded pipe without holding a proper license. A permit is not required.

A proper license is considered one of the boiler licenses that meet the classification requirements for the size of boiler being worked on or a "P" classification for high-pressure piping as defined previously.

Piping systems of low pressure boilers and those high pressure systems not discussed here fall under the jurisdiction of the state or local mechanical official.

Questions may be directed to the Boiler Division at 517/241-9334.

Education and Training Providers

by Scott D. Fisher, Director
Office of Local Government and Consumer Services

Continuing education requirements for code officials in Michigan became effective in 1991, during the 1990-1993 Code Cycle. During that first cycle, the Construction Code Commission approved approximately 800 programs, about half as many instructors and recognized only several organizations as providers of continuing education programs.

Today there are over 2,800 programs being offered to code officials by some 1,200 instructors and program providers that include inspector organizations, community colleges, and national code development organizations.

We have come a long way since the early days of registration. Many of those

who were opposed to registration and continuing education requirements are now their strongest advocates and work very hard to ensure adherence to the governing rules. Instructors and providers alike share the responsibility of ensuring that persons attending programs are in attendance for the entire program, regardless of the duration. Even though the number of programs, instructors, and providers has increased dramatically over the years, attendance problems of this nature have diminished because of the cooperative effort that has developed between the participant, instructor, provider and the Bureau.

However, on occasion reports are received indicating an inspector showed up two hours late for a three hour program, or signed in and out at the same time during the program and then left the building, expecting full credit for their brief attendance. Also, reports of inspectors attending a program that consists of mixed credits and leaving after their area of interest has been covered but prior to the end of the program are received.

It is important for everyone to remember that if credit is expected for a program attended, you must be there on time, and you must be in attendance for the entire duration of the program.

Thank you for your continued cooperation and support. If you have any questions, please contact the Office of Local Government and Consumer Services at (517) 241-9347.

Adaptive Re-use of Existing Structures

by Todd Cordill, Assistant Chief
Plan Review Division

The adaptive re-use of existing 2 or 3 story buildings in central business districts may cause questions and confusion for building owners, tenants, design professionals and, of course, building officials. In particular, buildings with more than one intended use create the most concern. The following case is offered as an illustrative example.

An existing 2-story building is situated in a central business district or downtown area. The building has a storefront and first floor that is currently vacant. The second floor is also vacant, but has no direct stair or elevator to the first floor space. The building owner has expressed interest in performing alterations to the first floor for mercantile, business, or assembly (restaurant) use. Likewise, alterations are proposed to the second floor for residential apartment (rental) use. Access to the second floor apartments will be achieved by means of enclosed stairs to the first floor with separate entry doors.

The Michigan Building Code sections that are pertinent to this illustrative example are:

1) MBC section 302.3, section 302.3.1 Two or more uses.

Where the building is occupied for two or more uses not included in the same occupancy, the building or portion thereof shall comply with section 302.3.2 or 302.3.3 or combinations of these sections, except that areas of group H shall be separated from other occupancies in accordance with section 302.3.3.

2) MBC section 302.3.2 Nonseparated uses.

Each portion of the building shall be individually classified as to use. The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building. Fire separations are not required between uses, except as required by other provisions.

3) MBC section 302.3.3 Separated uses.

Each portion of the building shall be individually classified as to use and shall be completely separated from adjacent areas by fire barrier walls or horizontal assemblies or both having a fire-resistance rating determined in accordance with table 302.3.3 for the uses being separated. Each fire area shall comply with the code based on the use of that space.

Barrier-free accessibility requirements for the proposed second floor apartment houses in the example are governed by Michigan Building Code section 1107.6.2.2 Group R-2 type B units. This code section states the following:

Where there are 4 or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and every sleeping unit intended to be occupied as a residence shall be a type B unit.

Therefore, if there are less than 4 dwelling units, then the barrier-free requirements do not apply.

The barrier-free accessibility requirements for the remainder of the existing building would be governed by Michigan Building Code section 3408 Accessibility for Existing Buildings. Within this section are various requirements that apply to project scope for additions and alterations. Many situations are addressed by the language in this section.

The Michigan Rehabilitation Code also addresses the following items as they pertain to adaptive re-use of existing buildings: repairs, alterations, additions, and compliance alternatives. Most of the requirements in this code address minor work taking place within an existing building. For extensive work, the previously mentioned code sections would apply.

Questions regarding the applicability of the cited code sections may be directed to the Plan Review Division at 517/241-9328.

Holiday Closings

State offices will be closed in observance of the following holidays:

November 27 & 28 - Thanksgiving
December 24, 25 & 26 - Christmas
December 31, January 1 & 2 - New Year
January 19 - Martin Luther King Jr Day
February 16 - Presidents Day

Manufactured Housing Rules Update

by Larry Lehman, Chief
Building Division

Amendments to the Manufactured Housing General Rules became effective August 1, 2003. These rules, for the first time, include building permit requirements and authorize the local enforcing agency to inspect the foundation system within manufactured home communities. Building permits have always been required for the installation of homes, including accessories, from the local enforcing agency.

Foundation system types are approved by the Bureau's Plan Review Division, and a foundation system for an existing community is considered approved provided it has been constructed within the guidelines of prior Manufactured Housing Commission approvals and is verified to the local enforcing agency.

Permit fees for manufactured housing are authorized by the Stille-DeRossett-Hale Single State Construction Code Act and should be structured to cover costs for the administration and enforcement of the code for services rendered. The Bureau of Construction Codes and Fire Safety prescribes a building permit fee for manufactured housing at 50% of a site constructed one- and two-family dwelling.

To summarize, building permits are required from the local enforcing agency for the installation of homes within manufactured home communities for new installations, additions, alterations, and accessory structures. Inspections shall include footing; foundation system; tie-downs; set-up including electrical, mechanical and plumbing approvals; with a final building inspection to issue a certificate of occupancy for each individual home when approved. Manufactured Housing community construction is under the authority of the Bureau of Construction Codes and Fire Safety. Questions may be directed to the Building Division 517/241-9317.

Public Acts may be purchased for \$2.50 each or may be downloaded for free at www.michigan.gov/bccfs.

Elevator Forms and Applications

by Calvin W. Rogler, Chief
Elevator Safety Division

The Elevator Safety Division is in the process of updating all forms and applications. Some of the changes are required by the adoption of the new code which is proposed to go into effect December 1, 2003. The rule numbering sequence within the proposed code is completely different than the current code. Any reference on a form or application to a current rule number must be changed to reflect the new rule number. To assist elevator journeypersons, contractors, and other customers the bureau is making forms and applications available for on-line completion. The redesigned forms and applications will be easier to understand and to complete. Most forms and applications will be available on the bureau website and may be completed, printed and mailed to the bureau with appropriate fees. Electronic submittal of forms and applications is not available at this time. This process should substantially reduce the time required to submit forms or applications.

Information necessary to complete forms and applications properly will also be available on the website with the specific form or application. These changes are scheduled to correspond with the effective date of the new code.

If you have any questions regarding the new code or forms and applications please call the Elevator Safety Division at 517/241-9337.

Water Heaters

by Tennison Barry, Chief
Mechanical Division

There has been a lot of confusion about water heaters and whether they can be used to provide space heating much like a boiler.

A boiler is a closed heating appliance intended to supply hot water or steam heating, processing or power purposes. Low-pressure boilers operate at pressures less than or equal to 15 psi for steam and 160 psi for water. A water heater is any heating appliance or equipment that heats potable water and

supplies such water to the potable hot water system.

It has been brought to my attention that there are contractors installing and inspectors accepting the use of a water heater to be used as a closed heating appliance (boiler).

The code has specific standards that boilers must meet. CSD-1 is a standard, which has specific requirements for controls and safety devices for boilers. These requirements include testing and maintenance. ASME Section I, II, V and IX are standards, which have specific requirements for the construction and installation of boilers.

The code also has specific standards for construction of water heaters. UL174, UL732 and UL1453 are the Standards for Household Electric and Oil-Fired Storage Tank Water Heaters. ANSI Z21.10.1 and ANSI Z21.10.3 are the Standards for Gas Water Heaters.

In conclusion: There are different requirements for the testing and construction of boilers and water heaters. It is also clear that they are intended for different uses. A boiler is designed and tested as a closed system. A water heater is designed and tested as a domestic water storage system. All equipment must be used as it was intended. Water heaters may not be used in place of a boiler.

If you have any questions you may contact Tennison Barry, Chief, Mechanical Division at 517/241-9325.

Contractor License Examination and Apprentice Registration Requirement

by Stella Morris, Chief
Electrical Division

The Electrical Division will debut the contractor license examination starting in January 2004. As provided in Section 338.883 of the Michigan Electrical Administrative Act of 1956, PA 217, (hereafter referred to as the act), Section 3 (1) of the act states:

"The board shall grant licenses and certificates to qualified applicants, issue orders, and promulgate rules necessary for the enforcement and administration of this act, and enforce and administer this

act. The rules shall be promulgated pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328."

Section 3 further states:

"(2) The examination fee for the following is \$25.00:

(b) Electrical contractor."

The examinee will have one and a half (1½) hours to complete the examination. The examination contains forty (40) multiple choice questions designed to test an individual's knowledge of all of the following:

(a) The Michigan Electrical Administrative Act.

(b) The provisions of the Stille-DeRossett-Hale Single State Construction Code, 1972 PA 230.

(c) The administration and enforcement procedures of the Michigan Electrical Code.

Electrical contractors who possess a valid contractor license issued by the state will not be required to take the examination.

The Electrical Division will also enforce the apprentice registration requirement for any applicant for journeyman licensure starting January 2004. Section 338.883e, (1), of the act states:

"An individual employed as an apprentice electrician shall register with the board on a form provided by the board within 30 days after employment."

Section 338.883d, Electrical journeyman's license; requirements . . . Section 3d(1)(d) states:

"Has not less than 8,000 hours of experience obtained over a period of not less than 4 years related to electrical construction or maintenance of buildings or electrical wiring or equipment under the direct supervision of a person licensed under this act."

Apprentices shall be required to be registered and show documented proof of registration for not less than 4 years to qualify to sit for the electrical journeyman license examination.

Questions may be directed to the Electrical Division 517/241-9320.



How to Contact the Bureau of Construction Codes & Fire Safety
Mailing & Physical Addresses, Fax Numbers, Web Site Address, Telephone Numbers

Mailing Addresses:

P.O. Box 30254 (Codes: general correspondence)
P.O. Box 30255 (Codes: permits, licenses, and other documents containing payment)
P.O. Box 30700 (Office of Fire Safety)
P.O. Box 30704 (Office of Land Survey and Remonumentation)
P.O. Box 30222 (Office of Local Government and Consumer Services)
Lansing, Michigan 48909

Physical Addresses:

2501 Woodlake Circle, Okemos (Administration; Office of Administrative Services; Office of Management Services; Boiler Division; Building Division; Electrical Division; Elevator Safety Division; Mechanical Division; Plan Review Division; and Plumbing Division)
7150 Harris Drive, Lansing (Office of Fire Safety)
6546 Mercantile Way, Lansing (Office of Local Government and Consumer Services; and Office of Land Survey and Remonumentation)

Fax Numbers:

Administration - (517) 241-9570
Codes - (517) 241-9308
Office of Fire Safety - (517) 322-1356
Office of Land Survey and Remonumentation - (517) 241-6301
Office of Local Government and Consumer Services - (517) 241-6371

Web site: www.michigan.gov/bccfs

Telephone Numbers:

Administration	517/241-9302
Office of Administrative Services (OAS)	517/335-2972
Office of Management Services (OMS)	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 Fire Safety (OFS)	517/322-1123
Office of Local Government and Consumer Services (OLGCS)	517/241-9347
Office of Land Survey and Remonumentation (OLSR)	517/241-6321
Plan Review Division	517/241-9328
Plumbing Division	517/241-9330

