

# 2009 MI Rehab Code

## Sections to Remember

### Chapter 1 – Scope and Application

**Compliance methods** are still the choice of the applicant, not the Building Official. A community can NOT refuse your using this code. Section 101.5 specifically states that the code application is “as selected by the applicant”.

### Chapter 7 – Level 2 Alterations.

There are several areas that have new provisions. They are found in Section 704 Fire Protection, Section 705 Egress and Section 707 Structural.

**Fire Protection** is a change that may affect an existing building that has a floor of occupancy more than 30 feet but less than 55 feet above the level of fire department vehicle access. Group B was added to this section this year and requires retroactive fire suppression system installation. There are 3 conditions and all three must apply;

1. The work area is required to be sprinklered under the Bldg. Code for new const.
2. The work area exceeds 50% of the floor area
3. The building has sufficient municipal water supply to the floor without the installation of a new fire pump.

This sprinklering does allow a reduced corridor rating if the story is provided with a sprinkler system throughout.

**Means of Egress** has a changed to Section 705.2 to allow egress to conform to the code under which a building was constructed as long as the Building Official finds no Distinct Hazard to life. Further there are expanded provisions for the use of Fire Escapes in Section 705.3.1.2.1. And last be aware of this one – if a work area exceeds 50% of a floor all exit doors from that floor where the work area is located to and including the exit discharge door shall be self closing and latching. Means nonconforming doors need to be changed.

**Structural** requirements for existing structural systems do require a review regarding seismic loads and if additional gravity loads are the result of the alteration. This will mostly affect buildings with assembly uses, emergency or critical care facilities or alterations that increase a building height or configuration that will result in the change of snow or wind load that a building is exposed to.

## 2009 International Fire Code Cautions during Local Adoptions

Chapter 46 of the International Fire Code contains many retroactive provisions. As an example your BOMA representatives to the MI Code Review Committee were able to have Section 1024 removed from the MI Building Code. That section required the installation of photoluminescent markings along the interior of all Exit Enclosures (Exit Stairways) in High Rise construction. Well, the language of Chapter 46 makes the marking of all exit enclosures mandatory in all exits regardless of a building's height.

There are other provisions in chapter 46 that may affect some building and not others.

Appendices B, C and D could have affect on your existing buildings. While the published language of Appendix B Fire Flow and C Fire Hydrant Locations and Distribution has language under the general sections that apply these requirements to buildings constructed after the adoption of the code. Jurisdictions could modify that language to relate to extensive alterations or additions are made to existing buildings. Doing so is supported when you consider the new provisions in Chapter 7 of the MI Rehab Code looking at retroactive sprinklering.

Appendix D Fire Apparatus Access Road has language that limits it to buildings or PORTIONS of buildings hereafter constructed. Well, is your new addition a portion of a building? Is it hereafter constructed?

My suggestion is to get a copy of the code and review these sections so you are aware of any affect these provisions will make to your properties. Be prepared to be active in dealing with these issues. Ask why these upgrades are necessary within the community? Is there an incident history that justifies these new provisions?



## Newman Consulting Group, LLC

Consultants for Energy-Efficient and Sustainable Buildings

6600 Valley Spring Road • Bloomfield Hills MI 48301-2841 • USA

### BOMA Codes Panel – 04/21/2011

#### Energy Standards:

- **ASHRAE Energy Standard 90.1-2007**, approved by the State of Michigan on March 8, 2011  
This is the standard used in codes for buildings except low-rise residential buildings of 3 stories or less. It provides minimum energy-efficient requirements for the design and construction of new buildings and their systems, new portions of buildings and their systems, new systems and equipment in existing buildings.  
*Prior to March 8, 2011, Michigan used the 1999 version of this Standard. ASHRAE Standard 90.1 was updated in 2001 and 2004 (issued every 3 years since 2001). 90.1-2007 is the Energy Standard referenced in LEED 2009.*
- **ASHRAE Standard 189.1-2009, Standard for the Design of High Performance Green Buildings**  
Purpose: To provide minimum requirements for the siting, design, construction and plan for operation of high-performance green buildings. This Standard requires energy efficiencies that are 20-25% more stringent than Standard 90.1-2004 and follows many of the recommendations in LEED 2009. It also includes Commissioning and Operations and Maintenance Guidelines as part of the Standard.
- **ASTM E2797-11 BEPA (Building Energy Performance Assessment) Standard** – Approved February, 2011  
Purpose: To facilitate and standardize the way building energy-use information is gathered and analyzed in the regulatory compliance process.
- **IGCC (International Green Construction Code)** – Scheduled March, 2012  
This code will reference ASHRAE Energy Standard 90.1-2010, which is considerably more stringent than 90.1-2007 in most areas, and ASHRAE Standard 189.1.
- **ASHRAE Building Energy Quotient (bEQ)** – 2<sup>nd</sup> quarter (?), 2011  
This will be a report card, similar to what is currently in use in the European Union, with grades from A+ to F, to rate the EUI (Energy Utilization Index) of a building in either kW/SF/yr or Btu/SF/yr to tell prospective owners and tenants how much energy the building uses. Example: Unless changed before the bEQ is released, an EPA Energy Star-rated building with a score of 75 will have a “C” on the report card.
- **EPAct 2005 (Energy Policy Act of 2005)**, August 8, 2005  
This law, originally set to expire 12/31/07, has been extended to expire on 12/31/2013. For commercial buildings, there is a potential tax deduction (not credit) of up to \$1.80/SF if the energy efficiency surpasses ASHRAE Energy Standard 90.1-2001 by 50%. This deduction is broken down in \$0.60 increments for 3 separate areas: Lighting, HVAC and Water Heating, and Building Envelope.

- **EISA 2007 (Energy Independence and Security Act of 2007)**, December 19,2007  
The bill includes a variety of new standards for lighting and for residential and commercial appliance equipment as well as renewable energy.
- **[www.dsireusa.org](http://www.dsireusa.org): Database of State Incentives for Renewables and Efficiency**  
DSIRE is a comprehensive source of information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency.

Comments:

1. People change for only 2 reasons:
  - A. They realize it's in their best interests
  - B. They're forced toBoth of these are happening today – at an ever-increasing rate.
2. 75-80% of buildings standing today will still be standing in 2030
3. Buildings use 40% of the energy and 70% of the electricity generated in the U.S.
4. The least expensive and best way to conserve energy and natural resources is in buildings.
5. There are many ways to do this. Watch for the new web page soon to be launched by your Sustainability Task Force (\$4S) on BOMAdet.org.

## Construction (Building) Codes in Michigan

- Michigan has adopted a uniform statewide construction code. Local municipalities are not allowed to adopt their own construction requirements.
- The statewide construction code is tied to international model codes, most of which are promulgated by the International Code Council (ICC).
- The ICC updates their model codes on a 3-year cycle. The ICC is about to publish their 2012 codes and will soon start work on the 2015 codes. The public is allowed to propose changes and there are public hearings on those changes. **This is an opportunity for influencing international construction code development.** All final code change decisions are made by public safety officials in an open hearing.
- The Director of the Michigan Bureau of Construction Codes (part of the Department of Energy, Labor and Economic Growth) is responsible for implementing Michigan's version of the model codes. On March 9, 2011 the 2009 ICC codes became effective in Michigan:
  - 2009 Michigan Building Code
  - 2009 Michigan Residential Code
  - 2009 Michigan Mechanical Code
  - 2009 Michigan Plumbing Code
  - 2009 Michigan Rehabilitation Code
  - 2009 Michigan Uniform Energy Code
  - 2008 National Electrical Code.
- The Director convenes several committees to review and advise him on changes to the national model codes and changes proposed by state residents. One stated purpose of these committees is "to eliminate restrictive, obsolete, conflicting, and unnecessary construction regulations that tend to increase construction costs." **This is a very accessible opportunity to influence the Michigan construction code** to eliminate code provisions without technical substantiation or that impose excessive cost relative to their benefit.
- The state currently revises its construction codes every 3 years, but legislation has been proposed to extend the cycle to 6 years.
- Several national model codes are not part of the uniform statewide construction code:
  - International Green Construction Code
  - International Fire Code
  - International Property Maintenance Code

BEWARE! Local municipalities may adopt the Fire Code or Maintenance Code. Municipalities, or the state, may try to make the voluntary Green Code a requirement.

Also, please be aware, when you have a construction project in an existing building, it is often advantageous to use the Michigan Rehabilitation Code to limit additional construction to meet the current Building Code.