

# State of the State

## Construction Regulation in Minnesota



**60th Annual Institute for Building Officials**  
**January 11, 2016**



# State of the State

## Construction Regulation in Minnesota



Ken Peterson, Commissioner  
**Minnesota Department of Labor & Industry**

Scott McLellan, Director  
**Construction Codes and Licensing Division**

# State of the State

## Construction Regulation in Minnesota



Ken Peterson, Commissioner  
**Minnesota Department of Labor & Industry**



February 18 in Brooklyn Center  
[www.dli.mn.gov/construction](http://www.dli.mn.gov/construction)

# State of the State

## Construction Regulation in Minnesota



Scott McLellan, Director  
**Minnesota Department of Labor & Industry**

# State of the State

## Construction Regulation in Minnesota



1. Codes
2. Education
3. Code Adoption
4. CCLD Initiatives
5. Challenges/Solutions update

# State of the State

## Construction Regulation in Minnesota



Why we have codes and inspections

# State of the State

## Construction Regulation in Minnesota



The following are reproduced with permission by Reuben Saltzman of Structure Tech of St. Louis Park, Minnesota

<http://www.structuretech1.com/home-inspection-photo-gallery/>

# Codes





## Residential Fire Sprinklers Invalid - St. Appeals Court

The Minnesota Court of Appeals issued an opinion on Oct 13, 2015, that stated the adopted Minnesota Residential Code rule that requires the installation of automatic sprinkler systems is invalid for the construction of all new:

- One-family dwellings over 4,500 square feet
- Two-family dwellings



## Residential Fire Sprinklers Invalid - St. Supreme Court

On December 29, 2015 the Minnesota State Supreme Court denied the Petition of the Department of Labor and Industry to review the decision rendered by the Minnesota State Appeals Court. Therefore, this confirms that the adopted Minnesota Residential Code rule that requires the installation of automatic sprinkler systems is invalid for the construction of all new:

- One-family dwellings over 4,500 square feet
- Two-family dwellings



## Residential Fire Sprinklers – Where do we stand?

- ❑ Fire sprinklers are not required:
  - Single family dwellings
  - Two family dwellings
  
- ❑ Fire sprinklers are required:
  - Townhouses
    - First required by IRC in 2009 & 2012
    - Previously required by MN amendment at 9,250 sq ft



## Residential Fire Sprinklers – Two family Dwellings

A building that contains two separate dwelling units with separation either horizontal or vertical on one lot that is intended to be occupied for living purposes.



## Residential Fire Sprinklers – Townhouses

A single family dwelling unit constructed in a group of...

- 1) two or more attached units in which each unit extends from
- 2) foundation to the roof and there is
- 3) open space on at least two sides of each unit.
- 4) Each dwelling unit shall be considered a separate bldg.
- 5) Separate utilities shall be provided to each dwelling unit when required.



## Residential Fire Sprinklers – Townhouses

A twin-home in Minnesota consists of two separate homes, with separate property identification numbers, that share a common wall. These properties may be owned and sold separately. They have separate utilities.

These would be considered a Townhouse



## Residential Fire Sprinklers – Townhouses

A duplex, on the other hand, typically has one county property identification number and as a result, one owner.

These would be considered a Two-family dwelling.











## 2015 Minnesota Plumbing Code

- ❑ The new 2015 Minnesota Plumbing Code becomes effective January 23, 2016
- ❑ It is known as Minnesota Rules Chapter 4714
- ❑ It adopts by reference with amendments certain chapters of the 2012 edition of the *Uniform Plumbing Code*



## 2015 Minnesota Plumbing Code

- ❑ The 2015 Minnesota Plumbing Code is published by the International Association of the Plumbing and Mechanical Officials (IAPMO)
- ❑ It is published for Minnesota in a single reformatted custom code book with Minnesota amendments
- ❑ It includes Chapter 4716 - Licensing & Apprentice Registration  
Chapter 1300 - Administration



2015

# MINNESOTA PLUMBING CODE



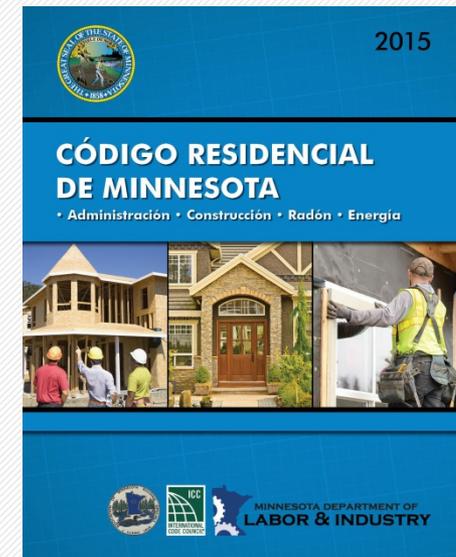
MINNESOTA DEPARTMENT OF  
LABOR & INDUSTRY



## Spanish version of *2015 Minnesota Residential Code*

For a limited time special pricing of **\$45** on this book from Minnesota's Bookstore.

The *2015 Minnesota Residential Code* Spanish version, is a custom code book published for Minnesota by the International Code Council. It includes Minnesota's amendments.





## Minnesota Fire Code

- The proposed Minnesota Fire Code was published for public comment on January 4, 2016. The public comment period ends at 4:30 Friday February 5.
  
- If a public hearing is required, it is scheduled for Monday February 29 at the Department of Labor & Industry at 9:00 am.
  
- When complete, the Minnesota Fire Code will be published as a Minnesota custom code as with the other Minnesota codes.



## View or buy code books

	View	Where to purchase:	
2015 Minnesota Building Code Administration	<a href="#">View</a>		<a href="#">From MN Bookstore</a>
2015 Minnesota Provisions to the State Building Code	<a href="#">View</a>		<a href="#">From MN Bookstore</a>
2015 Minnesota Building Code	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
2015 Minnesota Elevator and Related Devices Code	<a href="#">View</a>		<a href="#">From MN Bookstore</a>
2015 Minnesota Residential Code (English version)	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
<a href="#">2015 Minnesota Residential Code (Spanish version)</a>	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
2015 Minnesota Conservation Code for Existing Buildings	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
2015 Minnesota Energy Code	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
2015 Minnesota Accessibility Code	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
2015 Minnesota Mechanical and Fuel Gas Code	<a href="#">View</a>	<a href="#">From ICC</a>	<a href="#">From MN Bookstore</a>
<a href="#">2015 Minnesota Plumbing Code</a>	<a href="#">View</a>	<a href="#">From IAPMO</a>	<a href="#">From MN Bookstore</a>
<a href="#">2015 Minnesota: Understanding Amendments to the State Building Code</a>	<a href="#">View</a>		<a href="#">From MN Bookstore</a>

# Education





## **CCLD hired an education consultant to assist us in evaluating everything we do for training & education**

- Develop philosophy re:
  - methods; audience; subject matter
- Exam development and administration
- Continuing Education approval process
- New staff hires
- Education materials
- Training for trainers
- Feasibility of apprenticeship/mentorship
- Building Official Limited Training Program



## One result is that we have decided to focus our training in 4 areas

1. Codes enforced by building officials  
Building, energy, mechanical & accessibility
2. Minnesota Amendments & Statutes
3. Our entry-level feeder program  
Building Official Limited Training Program
4. Subject matter where we have specialized expertise



## Another result is that our focus will be on Teaching information versus Sharing what we know

- ❑ We have realized through evaluations that our audience wants more than just a lecture, they want to understand what we know.
- ❑ Going forward we will most often “**teach**” material, meaning our presentations will help others learn how to think about the subject, where to find information, how to understand the code, and how to analyze situations & make decisions.

# Code Adoption





## 2015 Legislative Changes

1. Beginning with the 2018 model codes & every 6 years thereafter, we must review new model codes for adoption
2. New model codes must be adopted for use in Minnesota within 2 years of the published edition date (2018 + 2 = 2020) (Spring 2017 through end of 2020 is 3 ½ years to accomplish)
3. Rules to adopt or amend the State Building Code are effective 270 days (9 months) after publication of adoption in the State Register



## 2015 Legislative Changes

4. The commissioner must publish an electronic version of entire adopted rule chapters on the department's website within 10 days of receipt from the Revisor of statutes.

Although we normally wouldn't receive until Rule became effective, the Revisor has now signed an MOU with us committing to providing a completed Rule Chapter to us within 60 days of adoption.

5. The commissioner must act on or evaluate each new model energy code for adoption in accordance with federal law.

# Code Adoption



## Streamlining the process

- ❑ Added & reorganized staff
  - Dedicated national code development
  - Dedicated State Building Code development
  
- ❑ Begin early, now!
  - We will soon begin reviewing the 2015 model codes for updates
  
- ❑ Work more efficiently using small groups
  - We will be establishing 3-4 person work groups to evaluate the codes



## Streamlining the process

- ❑ Hold stakeholder meetings after producing a working draft of the Rule
  - Feedback and input will be more directed and better productive time spent
  
- ❑ DLI will have additional legal resources to assist with development of the Statement's of Need and Reasonableness

# CCLD Initiatives



# Value of Code Enforcement



**Accra, Ghana tragedy from 2012 shows that building code enforcement is critical to disaster risk reduction**

The 6 story shopping center collapsed due to faulty construction, killing 14 people and trapping over 60 others. This disaster highlights the importance of implementing good building codes.

# Value of Code Enforcement



**Ottertail, MN waterpark roof collapse from 2015 shows that building code enforcement is critical to disaster risk reduction**

Disaster was averted at this waterpark when the roof suddenly collapsed without warning. Gratefully no one was hurt.



## Places of Public Accommodation

During the next year, we will begin a conversation with legislators and stakeholders over the need to guard the public trust that buildings containing larger assembly spaces are being constructed to comply with the State Building Code.



## Places of Public Accommodation

For purposes of this section, “place of public accommodation” means a publicly or privately owned sports or entertainment arena, stadium, theater, community or convention hall, special event center, indoor amusement facility or waterpark, swimming pool or other public facility for public assembly that is designed for occupancy by 200 or more people.



## *2016 Building Official Forum*

### **SAVE THE DATE**

#### **Forum information**

- June 10, 2016, 9:30 am to noon  
2.5 CE credits
- Breakfast will be provided
- Camp Ripley  
Educational Center, Room #167  
15000 Highway 115  
Little Falls, MN 56356-4173

#### **Registration opens May 1, 2016**

- [www.dli.gov/CCLD/Education.asp](http://www.dli.gov/CCLD/Education.asp)
- Admission is free but registration is required

### **2<sup>nd</sup> Annual Building Official Forum to be held at Camp Ripley Training Center**

CCLD will again host a Building Official Forum at Camp Ripley. This year's forum will review the progress and accomplishments made to address challenges facing the municipal building official including goals for the coming year, CCLD updates, and an open discussion on what minimum municipal code enforcement looks like.



## Fee Reduction

- ❑ DLI introduced legislation to reduce license/certification fees for most license categories on average by \$20 due to efficiencies seen in our on-line licensing process. This equates to about a \$1.5M reduction in annual license fee revenue.
- ❑ CCLD administers more than 130,000 personal and business licenses for the construction industry, most for a 2 year term.
- ❑ The 4 types of licenses are Entry, Journey, Master, Business



## **e-plan review**

Have begun limited implementation with Building and Plumbing Plans. To be fully operational and available at the Designer's option by Spring 2016.

# Challenges facing Building Officials -Solutions Update





# Minnesota Building Officials

*Results of a 2014 Survey*



**A demographic survey of Minnesota Building Officials conducted by the Minnesota Construction Codes and Licensing Division (CCLD) in cooperation with the Association of Minnesota Building Officials (AMBO)**

**Where possible, results are compared to a national survey of U.S. code officials conducted by the International Code Council (ICC) and the National Institute of Building Sciences (NIBS)**



**January 2015**



## Challenge

Simplify the complexity of the code

## Solution

Create a Minnesota-specific commentary on Minnesota "I" codes

1

### **Background:**

One way to simplify complexity of codes is to increase understanding of the requirements. A helpful tool for this purpose is the code commentary. Although the International Code Council (ICC) produces code commentaries on the model codes, none exist that include background or explanation on Minnesota-specific amendments. Therefore, to help designers, contractors, building officials and owners understand the rationale behind these unique amendments, it would be helpful to create a Minnesota commentary.

### **Plan:**

Staff will create an electronic commentary for the 2015 Minnesota "I" codes.

- Minnesota amendments to the model codes from the Reviser's website are inserted into chapters organized by individual code types.
- Individual SONAR analysis are assembled behind the applicable Minnesota amendments.

### **Who will address:**

Staff from CCLD

### **Constraints:**

Staff time

### **Resources needed:**

- Statements of Need and Reasonableness (SONAR) for existing amendments to all Minnesota "I" codes.
- Staff time

### **Estimated time to complete:**

6 months



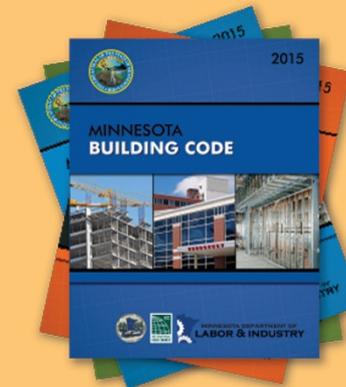
2015

# MINNESOTA

## UNDERSTANDING AMENDMENTS

to the **STATE BUILDING CODE**

- Administration
- Radon & Special Provisions
- Commercial Building Code
- Elevators and Related Devices
- Residential Building Code
- Existing Buildings
- Energy
- Accessibility
- Mechanical & Fuel Gas
- Plumbing



## RULE-BY-RULE ANALYSIS

MINNESOTA RULES, CHAPTER 1309  
MINNESOTA RESIDENTIAL CODE

## GENERAL

Throughout this rule in its entirety, references to the 2006 edition of the IRC are changed to 2012 because the Department is incorporating by reference the 2012 edition of the IRC.

## 1309.0010 ADOPTION OF INTERNATIONAL RESIDENTIAL CODE (IRC) BY REFERENCE.

**Subpart 1. Generally.** This rule subpart is modified by updating and replacing copyright information and permission that was provided by the International Code Council to the Department for incorporation of the 2012 IRC into this rule.

**Subp. 2. Mandatory chapters.**

**Chapter 43, Referenced standards.** This chapter is deleted and renumbered to Chapter 44 because the publisher added a new chapter to the code book, causing the Referenced Standards chapter to be renumbered.

**P2904, Dwelling unit fire sprinkler systems.** 2012 IRC, Section P2904 of Chapter 29, will become a mandatory section with the adoption of this rule. This section of the 2012 IRC is identified as one of the prescriptive fire sprinkler design methods for fire sprinklers required in IRC sections R302, R313 and R309. The content in this section did not exist in the 2006 IRC. Section P2904 is being required as a mandatory chapter in this rule to ensure proper design and enforcement of the code requirements for dwelling unit fire sprinkler systems. It is necessary and reasonable to include section P2904 as a mandatory chapter to provide effective and efficient use of fire sprinkler system designs.

**IRC Appendix K, Sound transmission.** This appendix is required as a mandatory appendix in Minnesota Rules, chapter 1309, because it will ensure proper design and will help enforce sound transmission requirements between two-family dwellings and townhouses. In the adoption of the 2006 IRC, Appendix K text was incorporated into section R317 in its entirety by amendment to prevent possible oversights by the design and enforcement industries. With the adoption of the 2012 IRC, the sound transmission requirements are incorporated by adding amendments to 2012 IRC, sections R302.3.2 and R302.5, which direct the user to

Appendix K. Appendix K requires that two-family dwellings and townhouses comply with the sound transmission requirements. It is reasonable and necessary to include Appendix K as a mandatory appendix chapter because the requirements are being carried forward and the amendment will continue to provide sound transmission protection between attached dwellings and townhouses.

**Subp. 3. Subitems B, D and E.** The reference to Minnesota Statutes, section 326B.115, in subitem B is deleted and replaced with a reference to the Minnesota Rule chapters that contain the residential and commercial energy codes. This amendment is necessary to ensure that the user is directed to the correct citation for the energy codes. Chapter references in subitems D and E are amended to reflect chapter and section renumbering that occurred in the 2012 IRC.

**Subp. 4. Seismic or earthquake provisions.** The existing rule deleted international model code requirements for seismic provisions in Minnesota with the 2006 IRC adoption. The current rule amendment is proposed for repeal. By repealing Minnesota Rules, part 1309.0010, subpart 4, Minnesota is subject to the seismic provisions in the IRC, which are incorporated by reference in Minnesota Rules, part 1309.0010, subpart 1. The Structural Advisory Committee recommended that the seismic provisions in the 2012 IRC model code document should apply in Minnesota because seismic provisions are necessary for practical application of all code provisions in the IRC. Adopting the 2012 IRC model code seismic provisions will impact current construction practices that were previously exempt from addressing IRC model code seismic concerns. However, Minnesota is located in Seismic Design Category "A," as identified in 2012 IRC Table R301.2(1). Seismic Design Category "A" is the category that contains the least restrictive construction requirements. Adopting the 2012 IRC seismic provisions and allowing Minnesota code users to apply the least restrictive Seismic Design Category "A" provisions will have little, if any, effect on current residential construction practices because those provisions are so basic as applied to residential construction that they do not require the additional expenditure of construction resources. Moreover, as noted by the Structural Advisory Committee, adoption of the 2012 IRC seismic provisions will encourage uniform enforcement and further practical application of all the IRC code provisions.]



## Challenge

Find & Prepare candidates for career in code enforcement

## Solution

Re-design the Building Official Limited education program to more effectively train candidates

# 2

### **Background:**

Since 1994, the department has offered a free 3-day training program 4 times a year to prepare candidates to become certified as a Building Official Limited. The purpose of this classification is to administer the Code for one-and-two family dwellings and certain small exempt commercial buildings. The division has evaluated the effectiveness of the current training program and determined it needs to be redesigned in order to better prepare potential candidates to be successful as a building official limited.

### **Plan:**

CCLD will redesign the program curriculum to accomplish the following goals based upon the scope of the certification for the Building Official Limited:

1. Teach students only what they need to know based on what they will routinely experience 80% of the time.
2. Train students to evaluate and perform site inspections.

The program will be expanded to a full 5 days.

### **Who will address:**

CCLD management will oversee the redesign of the training curriculum but welcome others' review of appropriate course content. Specific subject matter experts from CCLD will provide the instruction.

### **Constraints:**

CCLD staff time to complete curriculum redesign and provide instruction over the 5 days of training that is normally offered 4 times a year; Applicant's ability to attend multi-day training

### **Resources needed:**

Staff time

### **Estimated time to complete:**

Winter 2015

# Challenges facing Building Officials -Solutions Update



## Building Official Limited Training Program Course Outcome

Participants will learn from experienced industry experts what the State and their municipality expect from their building official. This includes knowing:

- What projects are within their authority
- Whether permit application materials are complete
- What code requirements apply to the work
- How to apply and interpret common code requirements
- How to recognize code compliant vs non-code compliant work
- How to perform building plan review and building inspection

# Challenges facing Building Officials - Solutions Update



## Building Official Limited Training Program – Subjects taught

- Essential Statutes
- Essential Administrative provisions
- Accessibility Code
- Residential Building Code
- Residential Energy Code
- Mechanical Code
- Plumbing Code
- Two-family dwellings and Townhouses
- Manufactured Structures
- Commercial Building Code introduction Career Options

# Building Official Limited & Accessibility Specialist Training Program

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00–8:15 am	Introduction: Paul Swett	Residential Building Code Mike Fricke Scott Wheeler	Residential Building Code Mike Fricke Scott Wheeler	Minnesota Plumbing Code Chris Meier	Commercial Building Code Greg Metz
8:15–9:00 am	Statutory Provisions of the State Building Code Scott McLellan				
9:00–9:30 am	Administrative Provisions of the State Building Code Rich Lockrem				
9:30–9:45 am	BREAK	BREAK	BREAK	BREAK	BREAK
9:45–11:15 am	Administrative Provisions of the State Building Code Rich Lockrem	Residential Building Code Mike Fricke Scott Wheeler	Residential Building Code Mike Fricke Scott Wheeler	Two-Family Dwellings & Townhouses Rich Lockrem	Evaluations Career Options Paul Swett Q&A Panel
11:15–Noon	LUNCH	LUNCH	LUNCH	LUNCH	DISMISS
12:00–1:30 pm	Accessibility Code Karen Gridley	Residential Building Code Mike Fricke Scott Wheeler	Residential Energy Code Don Sivigny	Manufactured Structures Herman Hauglid	
1:30–1:45 pm	BREAK	BREAK	BREAK	BREAK	
1:45–3:15 pm	Accessibility Code Karen Gridley	Residential Building Code Mike Fricke Scott Wheeler	Mechanical & Fuel Gas Code Chris Meier	Commercial Building Code Greg Metz	

# Challenges facing Building Officials - Solutions Update



## For the future...

We are planning an advanced track for those aspiring to become fully certified building officials. This may include:

- Commercial Plan Review & Inspection
- Fire Protection Systems
- Existing buildings code
- Building Department Administration
- Soft skills- working with people, communication

# Challenges facing Building Officials -Solutions Update



## For the future...

We are also discussing the possibility of creating some courses for Certified Building Officials. These might include:

- Public Buildings and State Licensed Facilities
  - Giving credit towards receiving Delegation Agreements
- Advanced Building Department Administration
  - Legal, management, roundtables, etc

Thank you!

