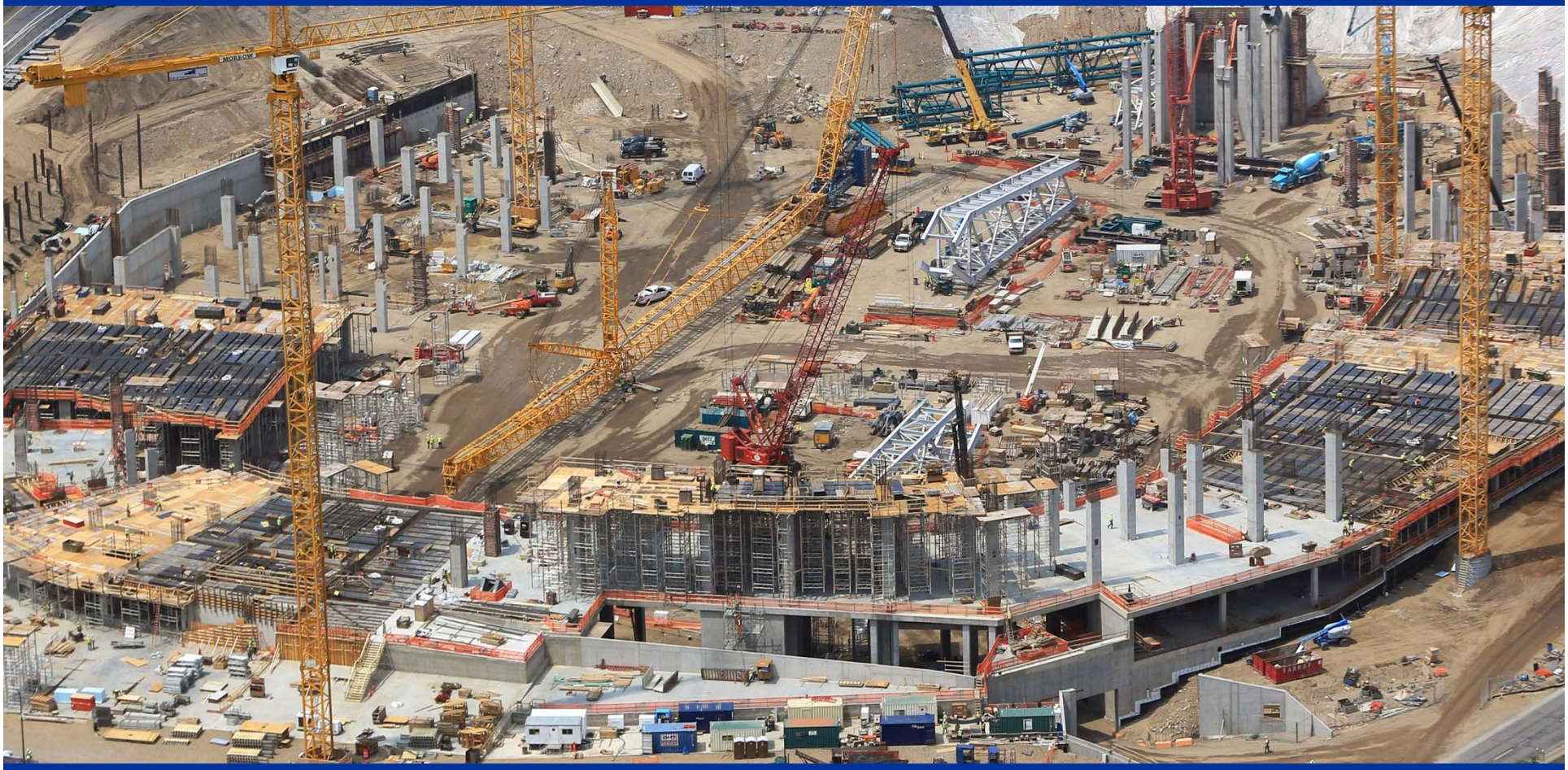
State of the State

Building Code Enforcement in Minnesota



Vertical Construction Conference (ACEC)
October 27, 2015

MINNESOTA DEPARTMENT OF
LABOR & INDUSTRY
CONSTRUCTION CODES AND LICENSING

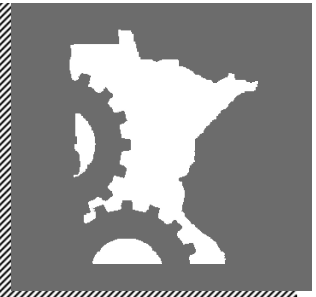
State of the State
from the Department of Labor & Industry

Scott McLellan, Director

Construction Codes and Licensing Division (CCLD)

Minnesota Department of Labor & Industry

State of the State
from the Department of Labor & Industry



1. State of the State
2. Value of Code Enforcement
3. Code Adoption
4. Code Interpretations
5. Q&A

State of the State

State of the State
from the Department of Labor & Industry

CCLD's Mission Statement

Protect the health, safety and welfare of the public by providing reasonable, uniform and balanced standards for Minnesota's Buildings and construction professionals

This includes code development, training, assistance, interpretations, and code enforcement.

State of the State
from the Department of Labor & Industry

CCLD Operations

- About 150 employees
- 50 staff are officed throughout the state
- CCLD subject matter experts include:
  - Plumbers, Electricians, Pipefitters, Boiler Operators
  - Architects & Engineers
  - Builders & Building Officials
  - Investigators & Attorneys

State of the State
from the Department of Labor & Industry

Operations

CCLD staff's mission is to protect the health, safety & welfare of the public by regulating the construction of buildings and construction professionals.

We do this in many ways…

State of the State
from the Department of Labor & Industry

Operations continued

- Licensing- 80 categories of personal & business (128,000); 9000 exams
- Enforcement- 2000 new cases each year
- Review Plans- 3000 Public & State licensed Bldgs and most plumbing
- Inspections- 157,000 each year in all areas
- Adopt Codes
- Provide Training

State of the State
from the Department of Labor & Industry

Code Adoption

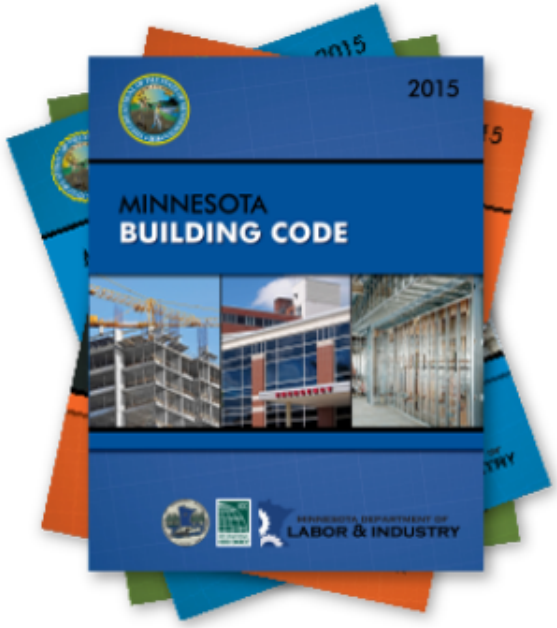
- Adopted 6 codes and 3 Rule chapters
- Fire Code in process. It will soon be published for public comment
- New Plumbing Code becomes effective January 23, 2016. The code is based on the 2012 Uniform Plumbing Code

State of the State
from the Department of Labor & Industry

The 2015 Minnesota state building codes

Code book fact sheets *(PDFs)*

- 2015 Minnesota Building Code Administration
- 2015 Minnesota Provisions to the State Building Code
- **2015 Minnesota Building Code**
- 2015 Minnesota Elevator and Related Devices Code
- 2015 Minnesota Residential Code
- 2015 Minnesota Conservation Code for Existing Buildings
- 2015 Minnesota Energy Code
- 2015 Minnesota Accessibility Code
- 2015 Minnesota Mechanical and Fuel Gas Codes



http://www.dli.mn.gov/ccld/codes15.asp

State of the State
from the Department of Labor & Industry

CODE BOOK FACT SHEET

2015 MINNESOTA BUILDING CODE

2015 MINNESOTA BUILDING CODE

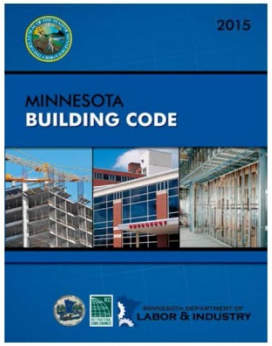
- Regulates the design, construction, addition, alteration, repair, use and location of all buildings and structures other than those regulated by the 2015 Minnesota Residential Code.
- Contains detailed provisions governing building construction. These include requirements for structural, means of egress, sanitation, life-safety, fire-safety, and moisture protection.
- Is in Minnesota Rules Chapter 1305. The rule adopts by reference Chapters 2 through 33 and 35 of the 2012 International Building Code (IBC) and includes amendments to the IBC.

EFFECTIVE DATES

- Minnesota Building Code became effective **June 2, 2015**.
- Radon Code became effective **Feb. 14, 2015.**

CODE BOOK

The 2015 Minnesota Building Code is a custom code book published for Minnesota by the International Code Council (ICC). It includes Minnesota's amendments into the body of changed sections and reads as a unified code book. It also includes Minnesota chapters about administration, radon and elevators. There is no longer a need to separately purchase the ICC model code and Minnesota amendments and refer to them both. Now they are contained in a single reformatted Minnesota-specific code book.



Code books are available for purchase and free, online viewing is available.

TO VIEW CODES ONLINE FREE

Visit www.dli.mn.gov/ccld/codes15.asp to view the code.

TO PURCHASE CODE BOOKS

- Minnesota's Bookstore
  www.minnesotasbookstore.com
  (651) 297-3000 or 1-800-657-3757

- International Code Council
  http://shop.iccsafe.org/codes/state-and-local-codes/minnesota.html
  (701) 931-4533

MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

This flier is a brief overview of Minnesota's Building Code and can be provided in different forms, such as large print, Braille or audio, by calling (651) 284-5012 or 1-800-657-3944. Visit www.dli.mn.gov/ccld/codes.asp for more information about this code. (Version 0914)

Minnesota Department of Labor and Industry | 443 Lafayette Road N., St. Paul, MN 55155 | Phone: (651) 284-5012 or 1-800-657-3944
Email: dli.communications@state.mn.us | Web: www.dli.mn.gov/CCLD.asp

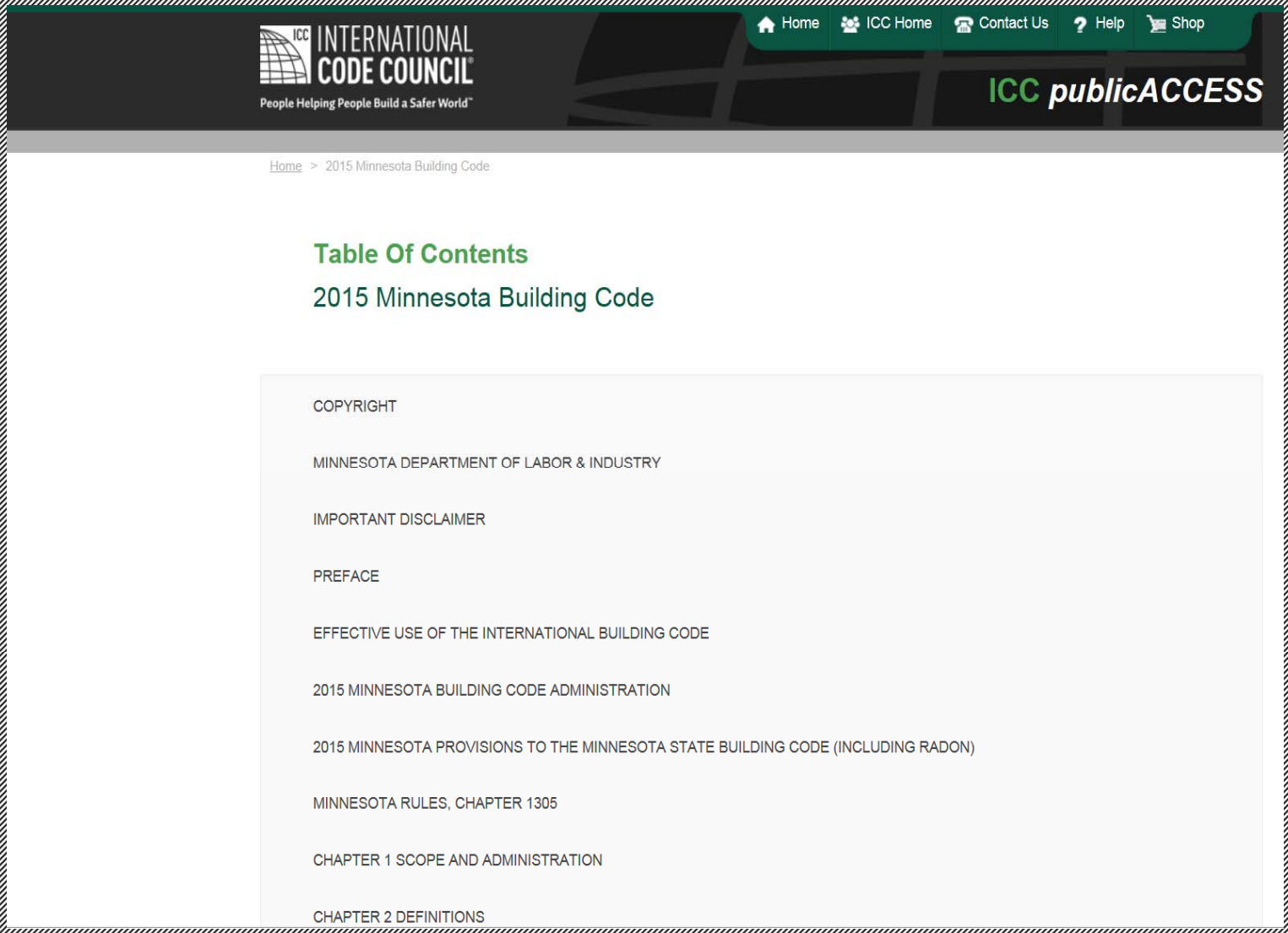
State of the State
from the Department of Labor & Industry

View or buy code books

	View	Where to purchase:	
2015 Minnesota Building Code Administration	View		From MN Bookstore
2015 Minnesota Provisions to the State Building Code	View		From MN Bookstore
2015 Minnesota Building Code	View	From ICC	From MN Bookstore
2015 Minnesota Elevator and Related Devices Code	View		From MN Bookstore
2015 Minnesota Residential Code (English version)	View	From ICC	From MN Bookstore
2015 Minnesota Residential Code (Spanish version)		From ICC	
2015 Minnesota Conservation Code for Existing Buildings	View	From ICC	From MN Bookstore
2015 Minnesota Energy Code	View	From ICC	From MN Bookstore
2015 Minnesota Accessibility Code	View	From ICC	From MN Bookstore
2015 Minnesota Mechanical and Fuel Gas Codes	View	From ICC	From MN Bookstore
Minnesota Electrical Code	View		From MN Bookstore
Minnesota Solar Energy Systems	View		
Minnesota Floodproofing Regulations	View		
Minnesota Manufactured Home Code	View		
Minnesota Prefabricarted Structure Code	View		
Minnesota Industrialized/Modular Building Code	View		
Minnesota Storm Shelters (Manufactured Home Parks)	View		
Minnesota Plumbing Code	View		From MN Bookstore
Minnesota High Pressure Piping Code	View		From MN Bookstore

» View errata for the 2015 Minnesota state building codes here

State of the State
from the Department of Labor & Industry



State of the State
from the Department of Labor & Industry

Education and training

- View the 2015-2016 education and training plan
- Annual Institute for Building Officials (Jan. 6-21, 2016)
- ICC Upper Great Plains Region III Educational Institute (Feb. 8-12, 2016)

Helpful resources (PDFs)

- Residential fire sprinkler fact sheet
- Residential Fire Sprinklers - Areas to be Protected
- Residential fire sprinkler installations information sheet - State Fire Marshal
- Quick Reference Guide to The Requirements for Automatic Sprinkler Systems in Residential Occupancies
- Code fact sheet - tiny houses

Frequently asked questions

- Residential fire sprinkler systems (PDF)
- Effective dates of Minnesota's state building codes

State of the State
from the Department of Labor & Industry

Residential Fire Sprinklers

Current amendment is result of years of work

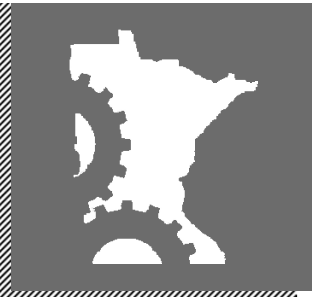
- First appeared in 2009 IRC (which MN did not adopt)
- 3 town hall meetings in 2008 & 2009 to solicit input
- 3 fire sprinkler task force meetings with stakeholders in 2010

State of the State
from the Department of Labor & Industry

Residential Fire Sprinklers

- Despite everyone's efforts, consensus could not be reached
- A compromise was established for houses constructed at 4,500 square feet or more of dwelling space
- This compromise focused on risk to occupants and firefighters when escaping or battling large house fires
- The average cost to install an automatic sprinkler system in Minnesota is $1.51 - $7,000 @ 4,500 sq. ft. or 1-2%

State of the State
from the Department of Labor & Industry



ePermitting

- Over 100,000 online permits issued annually
- Convenience of online credit card payments
- Permits issued without delay of US Mail
- Permit status is available to applicants 24x7

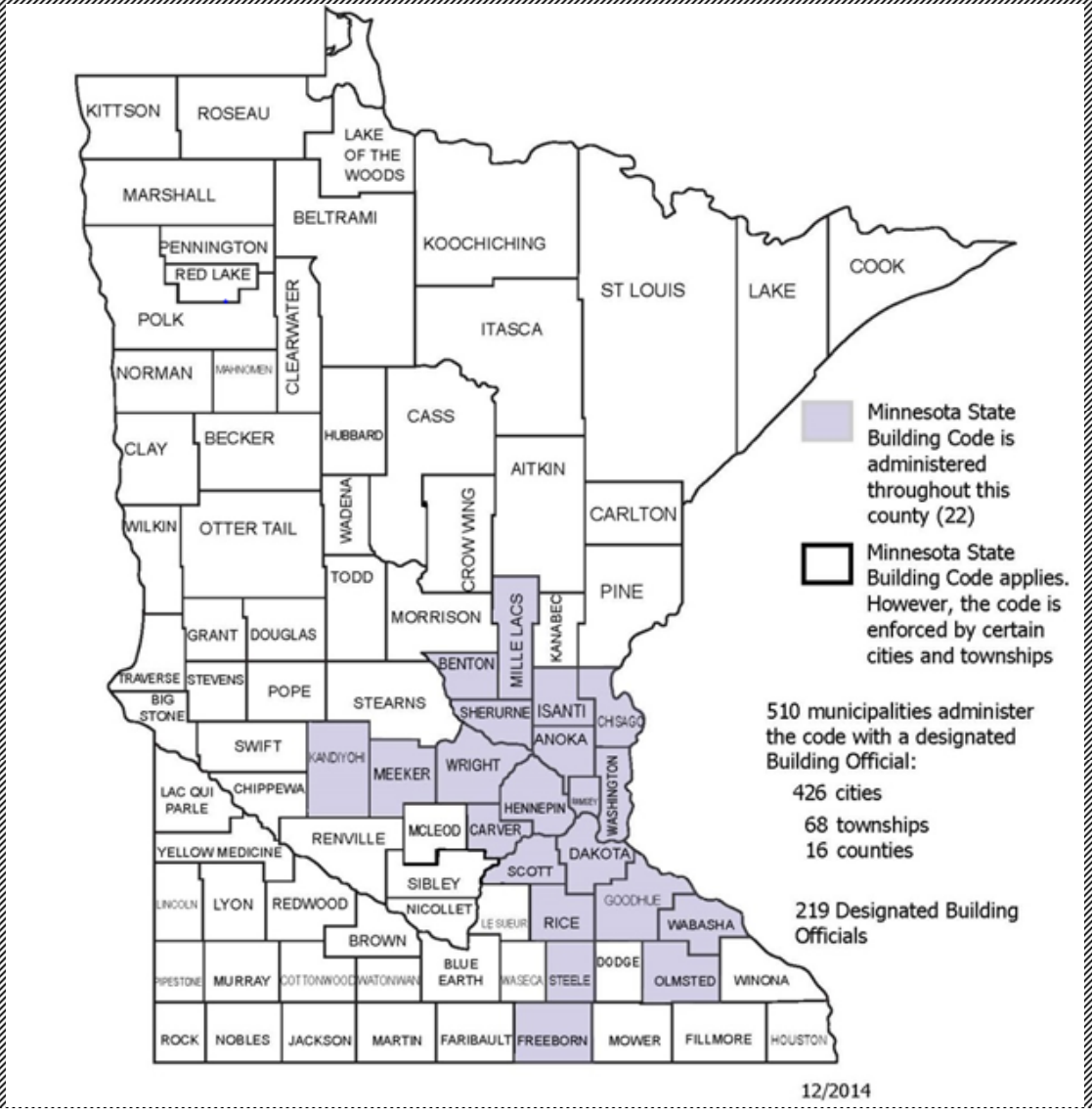
State of the State
from the Department of Labor & Industry

ePlan Review

- ePlan review rolling out fall/winter of 2016
- ProjectDox is the industry's leading ePlan solution with over 120 jurisdictions using the product
- Plan status and access to approved plans available 24 hrs/day
- Applicants will experience cost savings related to plan printing, delivery and turn-around time

State of the State
from the Department of Labor & Industry

Minnesota State Building Code



Value of Code Enforcement

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

Damage can be seen at the Thumper Pond Lodge

Even in Minnesota, buildings have been known to fail in the absence of enforced building codes.

Value of Code Enforcement

Public Safety

- Mandatory, minimum building codes are still the most effective, least expensive way to protect **buildings** and **people** from a wide range of hazards including
  - extreme events of fire, floods, earthquakes and windstorms
  - everyday risks from trips, falls, glass breakage, air quality, electrical, plumbing, mechanical system safety, as well as accessibility and energy efficiency

Value of Code Enforcement

Construction Economy

- By protecting Public Safety, code enforcement is saving billions in preventing loss of life, injuries and damage to buildings

- The Construction Industry is a barometer of our economy
  - When the number of building permits soar, so does construction employment, putting a lot of people to work
  - When a building permit is issued, construction workers go to work!

Value of Code Enforcement

Construction Economy

- Building Officials and Code Inspectors must be a productive part of the construction process

- Good code enforcement is collaborative, accurate and efficient

Value of Code Enforcement

Valued part of Construction Team

- Architects and engineers design buildings to meet code
- Building officials review plans to verify code
- Contractors and trade professionals build to the plans
- Building Inspectors verify that the building complies with code

Value of Code Enforcement

Trending Code Issues

- **Green Code Regulation** – New national model
- **Stretch Codes** – (more restrictive energy requirements)
- **Building Resiliency** – Protection from weather extremes

Value of Code Enforcement

Green Codes

One standard to rule them all:

- International Green Construction Code (IGCC)
- ASHRAE
- LEED

Value of Code Enforcement

New Framework for Green Building Code Adoption

Value of Code Enforcement

Stretch Codes

What is it?

A Stretch Code is a set of code requirements providing a higher standard for energy efficiency than the state's base building code (8th Edition/IBC 2009).

Value of Code Enforcement

Building Resiliency

Defined as:

The ability to prepare and plan for, absorb, recover from, and more successfully adapt to ***adverse events.***

Value of Code Enforcement

Building Resiliency

"We recognize that natural and manmade hazards pose an increasing threat to the safety of the public and the vitality of our nation. Aging infrastructure and disasters result in unacceptable losses of life and property, straining our nation's ability to respond in a timely and efficient manner."

Building design & construction professionals

Value of Code Enforcement

Building Resiliency

"As leaders of this industry, we are committed to significantly improving the resilience of our nation's buildings, infrastructure, public spaces, and communities."

StormCenter COMMUNICATIONS, INC.

Home » Presentation Services » ICC Presentation

Climate Change & Extreme Weather: What's Going On and How Might Building Codes Be Affected?

The extreme weather that has been experienced in the United States and around the world have millions of people wondering "What is going on with the weather?" Changes are occurring in the climate system globally and these changes are affecting our weather patterns.

In 2011 alone, the US experienced a record 14 disasters of $1 Billion or more in damages. Since 1980 the US has sustained 134 weather/climate disasters that exceeded $1 Billion each. The total standardized losses for the 134 events exceeds $880 Billion. More frequent and intense droughts, heat waves, storms and flooding events are exposing more and more people and property to risk and make them more vulnerable to adverse impacts and economic losses. Extreme events will also affect human health and other sectors such as agriculture, transportation, energy, water and ecosystems.

Value of Code Enforcement

2014 Breaks Record for Warmest Year, NOAA and NASA Experts Say

- A new report names 2014 as the warmest year since records were first kept in 1880.

2015 seems set to break record as warmest year

Code Adoption

CCLD rulemaking home

- Agency-wide rulemaking
- Code history
- CCLD homepage
- Minn. State Building Code
- CCLD Review newsletter
- Contact us

Structural Advisory Committee

Note: Information for these committees will be added as it becomes available

- **Committee membership**
- **Meeting schedule, agendas and notes**

Committee proposals

- **Proposals accepted**
- **Proposals rejected**

Rule drafts

- Committee drafts
- Revisor drafts

- Sonars
- Post-advisory committee rule draft change log (spreadsheet)
- Publications
- ALJ reports

Other information

http://www.dli.mn.gov/CCLD/rm/SAC.asp

Structural Advisory Committee

Agendas and notes - Structural Advisory Committee

Meeting Date	Topics	Meeting Notes
March 21, 2013		Notes
March 7, 2012	IBC 20/23/31, IRC 10, 1305/1309, IEBC	Notes
Feb. 9, 2012	IBC 21/22, IRC 7/8, related 1305/1309	Notes
Jan. 11, 2012	IBC 18/19, IRC 5/6, related 1305/1309	Notes
Dec. 12, 2011	Handbook, IBC 16/17, IRC 3/4, 1305/1309	Notes
Nov. 9, 2011	Intro, 1303, IBC 2/14/15, IRC 2	Notes

Structural Advisory Committee - Members

Dan Kelsey (DLI) chair

Primary representative	Alternate
Frank Berg (AMBO)	Doug Whitney (AMBO), Scott Knudson (AMBO)
Randy Johnson (AMBO)	Gene Abbott (AMBO)
Tom Lorentz (ASCE)	Dale Thomas (ASCE)
JeHangir (Rudy) Rudina (ASME)	Lucio Palmieri
Trevor Axner (BAM)	TBD (BAM)
Mike Lederle (MNSEA)	Ross Turner (MNSEA)
Dan Murphy (MNSEA)	Craig Oswell (MNSEA)
Ron Shaffer (MNSEA)	
Dr. Abi Assadi (MnSPE)	Peter Liukkonen (MnSPE)
James McDonagh (NAFE)	

443 Lafayette Road N.
St. Paul, Minnesota 55155
www.dli.mn.gov

MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

(651) 284-5005
1-800-DIAL-DLI
TTY: (651) 297-4198

ADVISORY COMMITTEE COMMENT FORM

FOR PROPOSED CODE CHANGES

(This form must be submitted electronically)

Author/requestor:

Email address:

Telephone number:

Firm/Association affiliation, if any:

Proposed Code Change - Language

Please provide your proposed code change in strikeout/underline format. Provide the *specific* language you would like to see changed, with new words underlined and words to be deleted should be ~~striken~~. Also, state whether the language contained in your proposal is from a code book or from an amendment currently found in Minnesota Rule. (You may provide the language (electronically) on a separate, attached sheet).

Proposed Code Change – Need and Reason

Please provide a thorough explanation of the need for this change and why this proposed code change is a reasonable change. During the rulemaking process, the Agency must defend the need and reasonableness of all its proposed changes. The Agency must submit evidence that is has considered all aspects of the proposal. (You may provide the need and reason (electronically) on a separate attached sheet).

Proposed Code Change – Cost/Benefit Analysis

Please consider whether this proposed code change will increase/decrease costs or indicate that it will not have any cost implications and explain how it will not. If there is an increased cost, will this cost be offset somehow by a life safety or other benefit? If so, please explain. Are there any cost increases/decreases to enforce or comply with this proposed code change? If so, please explain. (You may provide the cost/benefit analysis (electronically) on a separate, attached sheet).

Other Factors to Consider Related to Proposed Code Change

1. Is this proposed code change meant to:

   ☐ change language contained in a published code book? If so, list section(s).

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ delete language contained in a published code book? If so, list section(s).

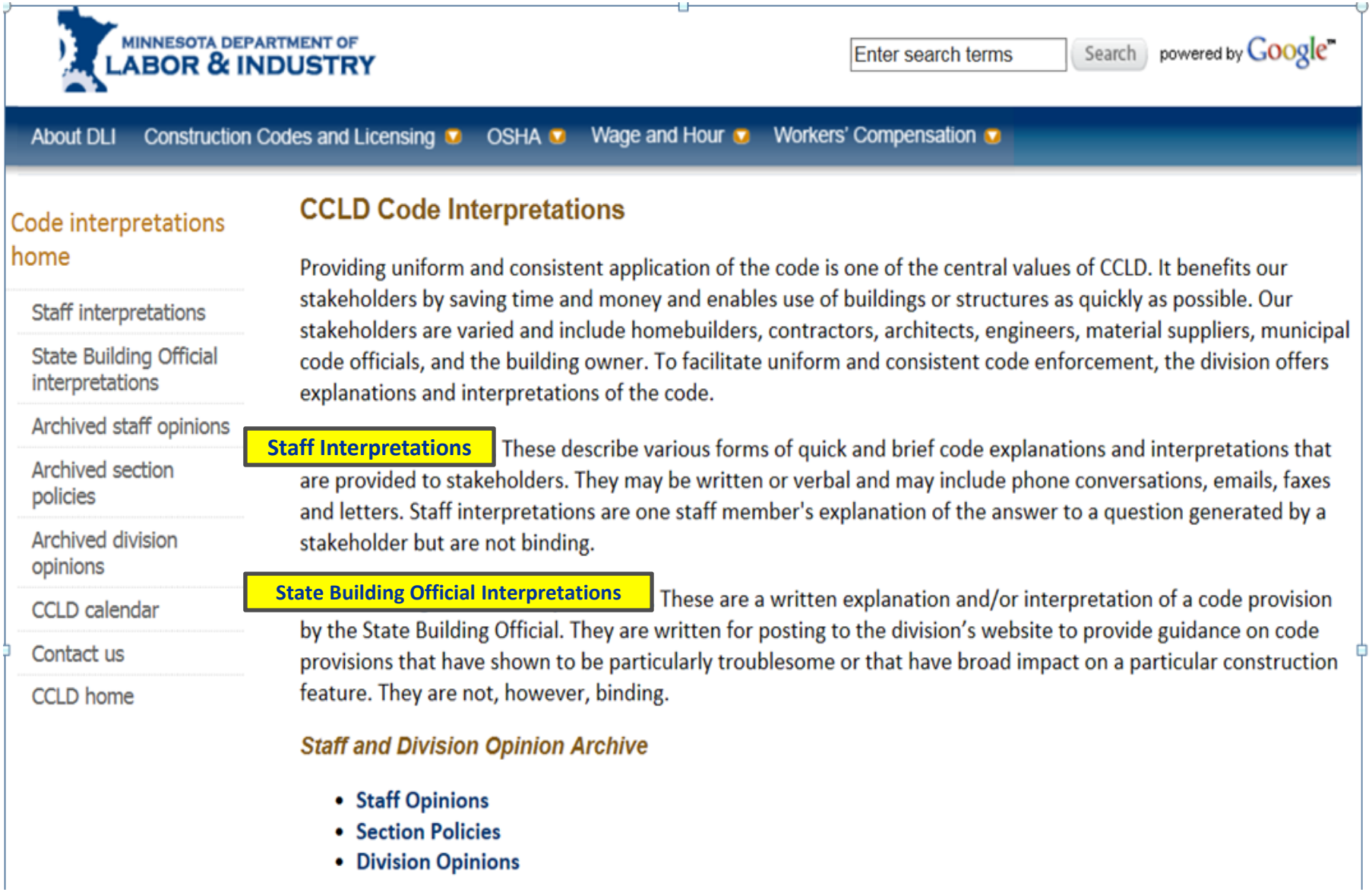
   ☐ delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ neither; this language will be new language, not found in the code book or in Minnesota Rule.

2. Is this proposed code change required by a Minnesota Statute or new legislation? If so, please provide the citation to the Statute or legislation.
3. Will this proposed code change impact other sections of a published code book or of an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.
4. Will this proposed code change impact other parts of the Minnesota State Building Code? If so, please list the affected parts of the Minnesota State Building Code.
5. Who are the parties affected or segments of industry affected by this proposed code change?
6. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
7. Are you aware of any federal requirement or regulation related to this proposed code change? If so, please list the regulation or requirement.

http://www.dli.mn.gov/CCLD/rm/doc/change.doc

Code Interpretations


MINNESOTA DEPARTMENT OF
LABOR & INDUSTRY
Enter search terms
Search
powered by Google
About DLI
Construction Codes and Licensing
OSHA
Wage and Hour
Workers' Compensation
Code interpretations home
Staff interpretations
State Building Official interpretations
Archived staff opinions
Archived section policies
Archived division opinions
CCLD calendar
Contact us
CCLD home
CCLD Code Interpretations
Providing uniform and consistent application of the code is one of the central values of CCLD. It benefits our stakeholders by saving time and money and enables use of buildings or structures as quickly as possible. Our stakeholders are varied and include homebuilders, contractors, architects, engineers, material suppliers, municipal code officials, and the building owner. To facilitate uniform and consistent code enforcement, the division offers explanations and interpretations of the code.
Staff Interpretations
These describe various forms of quick and brief code explanations and interpretations that are provided to stakeholders. They may be written or verbal and may include phone conversations, emails, faxes and letters. Staff interpretations are one staff member's explanation of the answer to a question generated by a stakeholder but are not binding.
State Building Official Interpretations
These are a written explanation and/or interpretation of a code provision by the State Building Official. They are written for posting to the division's website to provide guidance on code provisions that have shown to be particularly troublesome or that have broad impact on a particular construction feature. They are not, however, binding.
Staff and Division Opinion Archive
Staff Opinions
Section Policies
Division Opinions

State Building Official Interpretations

These are a written explanation and/or interpretation of a code provision by the State Building Official. They are written for posting to the division's website to provide guidance on code provisions that have shown to be particularly troublesome or that have broad impact on a particular construction feature. They are not, however, binding.

- **Table R402.2 – Minimum Specified Compressive Strength of Concrete Footings** (PDF)
- **Code Adoption** (PDF)

OFFICE MEMORANDUM

MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

A trusted resource utilized by employees and employers …

DATE: May 6, 2015

TO: CCLD Staff

FROM: Scott McLellan, State Building Official

SUBJECT: Table R402.2 - Minimum Specified Compressive Strength of Concrete Footings

---

Question:
Amended table R402.2 of the 2015 Minnesota Residential Code specifies 5,000 psi concrete or 2500 psi concrete with approved admixtures for footings. Does this requirement apply to all types of residential footings?

Answer:
The purpose of the requirement is to prevent ground moisture from entering the house by passing through footings and concrete or masonry block foundation walls that enclose basements or crawl spaces.

The requirement is not intended to apply to post footings for decks or porches, wood foundations, slab-on-grade foundation walls and footings or floating slabs.

Background:
Minnesota Statute 326B.118 requires that a model energy code not be adopted without "research and analysis" that addresses at a minimum, air quality, building durability and moisture. To view 326B.118, go to https://www.revisor.mn.gov/statutes/?id=326B.118.

Research and analysis was conducted that investigated "the occurrence of significant condensation on the interior surface of any interior condensation plane." The interior surface of foundation walls was the focus of the research. To view the research, go to http://www.dli.mn.gov/CCLD/PDF/foundation_report.pdf

OFFICE MEMORANDUM

MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

A trusted resource utilized by employees and employers …

DATE: October 5, 2015

TO: CCLD Staff

FROM: Scott McLellan, State Building Official

SUBJECT: Application of 2015 Legislation affecting Code Adoption

---

Following are the changes and impact on the building code adoption process. These provisions do not apply to the state fire code because the fire code is not part of the State Building Code chapters.

M.S. 326B.13 Subd.8: Some of these changes apply to only CCLD chapters of the building code, and some also apply to Board chapters of the building code as described below:

1) A rule adopting or amending the State Building Code is now effective 270 days (9 months) after publication of notice of adoption in the State Register. This was increased from 180 days (6 months) in order to provide additional time for stakeholders to educate and otherwise prepare to implement new code provisions. This change applies to CCLD rules and Board rules. Only rules proposed by the commissioner may provide for an earlier effective date if the commissioner finds an effective date is necessary to protect public health after certain considerations; board-proposed rules cannot provide for an earlier effective date.
2) The commissioner must publish an electronic version of the entire adopted rule chapter on the department's website within 10 days of receipt of a copy of the new rule from the Revisor of statutes. Rather than waiting until after the 270 days have passed for a Rule to become effective, the Revisor's office has committed to providing the department an electronic copy of the new adopted rule chapter within 60 days of adoption. Providing this integrated final chapter of new and existing rules 4-5 months sooner will enable both our stakeholders and us to provide necessary training well in advance of the effective date. This change applies only to CCLD chapters of the building code, but board-proposed rules will likely follow this same timeline.

M.S. 326B.106 Subd.1: These changes apply only to CCLD chapters of the building code and NOT to Board rules:

1) Subpart (c) requires that beginning with the 2018 edition of the model building codes and every six years thereafter, the commissioner shall review the new model building codes and adopt the model codes as amended for use in Minnesota within two years of the published edition date. This codifies the practice the department began in 2006 that new editions of the model codes are adopted on the six year publication cycle (every other published edition). As the model codes are available from the publisher in the spring prior to the publication date, this gives the department most of 2017, 2018, 2019 and until the end of 2020 to adopt. This is nearly 4 years to publish a rule notice of adoption in the State Register.
2) Subpart (d) requires that the commissioner act on or evaluate each new model energy code for adoption in accordance with the parameters of federal law. As also in subpart (c), the commissioner may adopt amendments prior to adoption of new published codes to advance technology, methods and materials or protect public safety or improve efficiency.

Questions?


Thank you!