



CCLD REVIEW

CONSTRUCTION CODES AND LICENSING DIVISION

SPRING 2007

First three 2006 MSBC chapters adopted, more set to launch by May 31

The 2006 Minnesota State Building Code (MSBC) is comprised of many different chapters. The first chapters adopted are:

- Chapter 1307, Elevators and Related Devices;
- Chapter 1341, Minnesota Accessibility Code; and
- Chapter 1305, Adoption of the International Building Code.

Other MSBC chapters building momentum in the rulemaking process are: International Residential Code (IRC), Chapter 1300 Administrative Code, Chapter 1306 Special Fire Protection Systems, Commercial Energy Code, Residential Energy Code, Conservation Code (rehabilitation code for existing buildings), International Mechanical Code, International Fuel Gas Code and Minnesota provisions to the Minnesota State Building Code.

May 31, 2007, was selected as the implementation date for the International Codes to give CCLD

adequate time to complete the rulemaking process and provide municipalities time to adopt and implement the new codes.

In addition, Chapter 7511, Minnesota State Fire Code, which incorporates the 2006 International Fire Code, will be adopted May 31, 2007.

The 2008 National Electrical Code is scheduled to be adopted in July 2008.

To view the progress or to receive an e-mail message about each rule's progress, view DLI's Web page at www.doli.state.mn.us/rulemaking_activity.html.

Additional information about the rulemaking process is available at www.leg.state.mn.us/leg/statutes.asp.

A flowchart of the long rulemaking process is available at www.doli.state.mn.us/bc_rulemaking_flowchart.pdf.



Tom Anderson,
Executive Director,
Construction Codes
and Licensing

Director's corner ...

After spending the summer of 2006 meeting with industry stakeholders and interested parties, the Commissioner of the Department of Labor and Industry is presenting a fine-tuned CCLD reorganization bill to the 2007 Legislature. The revised bill includes items that will consolidate the former five CCLD entities into one organization, this includes:

- Updating all department references to the Department of Labor and Industry;
- Updating all commissioner references to the Commissioner of Labor and Industry;
- Making clerical or grammatical edits to clean up outdated language;
- Combining the enforcement language of all consolidated entities creating a single set of enforcement tools that is based on the best practices recommended by each entity;
- Combining five funding sources into one special revenue fund to be called the "Construction Codes Fund Account" and update all references.

If approved by the Legislature, the reorganization bill will allow CCLD to move forward to meet the [mission](#) of the division.



High-pressure-piping question and answer

What work may unlicensed businesses and individuals perform on high-pressure-piping systems?



The only type of work businesses or individuals may perform on systems under the jurisdiction of the Minnesota High-Pressure-Piping Code are routine repairs to existing installations.

Examples of routine repairs are: replacement of like-for-like threaded or flanged valves, strainers, steam traps, relief valves or gauges, etc., as well as manufactured threaded pipe nipples.

The only welding allowed without the appropriate license and permit are temporary patch welds or weld reinforcements. Any additions or alterations to existing systems require a business licensed with the state, an appropriate HPP permit and employing licensed journeyman pipefitters.

Do Minnesota HPP license and permit requirements cover HPP systems fabricated or constructed outside of Minnesota, for installation in Minnesota?



The short answer is yes. However, manufacturers of package boilers such as Fulton Boiler Works who supply boilers on skids with limited piping attachments mounted on the boiler skid are allowed. These are only allowed if they are standard equipped as part of that model. Any HPP

system constructed or fabricated to specific customer specifications, and not as a catalog item, require that fabricator to be licensed with the state, and must have applied for the appropriate permit. This also applies to ammonia refrigeration piping and components.

If you have any HPP questions, please contact Todd Green at (651) 284-5124 or via e-mail at Todd.A.Green@state.mn.us.

Just for electrical contractors Electrical inspector directory online



A complete directory of electrical inspectors (both state and municipal electrical inspectors) is online at www.electricity.state.mn.us/Ele_insp/ElectricalInspectorDirectory.pdf.

Congratulations to the following contract electrical inspectors who have taken the initiative to create their own Web sites: Ron Beldo, Lowell Bradbury, Patrick McMullen, Brian Nelson, James Noonan, Josh Prussia, Mark Smythe and Doug Torvund. The sites identify the territory they are assigned to and provide instructions for scheduling inspections.

CCLD staff make presentations at annual industry conferences



Left: Tom Anderson, CCLD executive director, presented a "State of the State Codes" address Jan. 10 at the 2007 U of M Annual Institute for Building Officials in St. Paul, Minn.



Left: Barry Grieve, CCLD, explains national construction codes and Minnesota amendments Feb. 6, 2007, at the ICC Upper Great Plains Region III Educational Institute in Brooklyn Park, Minn.

Uniformity identified as the first goal toward successful construction code enforcement

The Enforcement Services unit is moving forward with its plans for a more uniform and efficient investigative and enforcement process. However, critical to the unit's success is the passage of the CCLD's proposed legislation, which includes language that would allow all CCLD functions to use the same set of enforcement tools for all of the trades it regulates.

Currently, CCLD must use different processes provided under the existing statutes and rules governing building contractors, plumbers, electricians, boilers and high-pressure piping. Ultimately, Enforcement Services would like to have each of its investigators trained to conduct investigations across industry lines. This would increase efficiency and ensure consistent and fair enforcement of CCLD laws and rules. The uniform enforcement tools CCLD seeks in its legislation will speed this process up to the benefit of consumers, licensees and other industry stakeholders.

Five investigators handle complaints against residential building contractors, remodelers and roofers. In addition, the unit has added an investigator dedicated to plumbing investigations and another to handle all electrical investigations.

Cindy Claason, who has been a residential building contractor investigator for seven years, has moved to the plumbing investigator position and Toni Harvey, a veteran fraud investigator and supervisor from DLI's Workers' Compensation Division, has taken the electrical investigator position. CCLD looks forward to the ability to concentrate its responsibility for enforcement functions with dedicated and skilled investigators who bring a wealth of skill and knowledge to these new positions.

Record high numbers in 2006 for contractor enforcement actions and penalties assessed

A record high number of actions taken and civil penalties assessed in 2006 resulted in a busy year for building contractor enforcement. It appears economic and other market factors are continuing to have an increasingly negative impact on many residential contractors. CCLD Enforcement Services saw an increase in the number of complaints involving builders unable to sell speculation homes and pay subcontractors, and suppliers and remodeling contractors who failed to complete their projects and make payments to their creditors.

All final administrative enforcement orders issued in connection with residential building contractor and remodeler investigations are published online at www.doli.state.mn.us/rbc_enforcement_actions.html. Orders are listed in alphabetical order by month and year-to-date.

CCLD Review is a quarterly publication of the Minnesota Department of Labor and Industry. Its purpose is to inform construction and code officials about the purpose, plans and progress of CCLD.

To receive e-mail notification about future issues of the *CCLD Review*, [subscribe online](#). Send any questions, story ideas or comments to dli.ccldreview@state.mn.us.

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Did you know?



Technology systems licensing and inspection chart

A revised copy of the chart outlining the *Electrical Licensing and Inspection Requirements for the Installation of Technology Systems by Employees of Licensed Electrical or Technology System Contractors or Employers* has been published on the CCLD Web site at www.electricity.state.mn.us/Ele_insp/Insp_bul/LicAndInspChart.pdf.

This chart is a critical tool in helping to ensure that technology circuits and systems are installed in accordance with Minnesota laws and rules. The chart is meant to be a valuable guide for technology system contractors, electrical contractors, power-limited technicians, electricians, electrical inspectors, registered employers and others. Depending on the type of technology circuit or system and the type of occupancy, it can be readily determined if the electrical worker requires a personal license and if the electrical work is required to be inspected.

Type of Circuit or System	Types of Occupancies											
	Personal License	Inspected	Other Than Dwelling	Dwelling	Classroom	Day Care	Healthcare	Hotel	Industrial	Manufacturing	Office	Residential
Class 2 or 3 alarm and signaling circuits	N	N	N	N	N	N	N	N	N	N	N	N
Power limited fire alarm systems	N	N	N	N	N	N	N	N	N	N	N	N
Data circuits and cabling	N	N	N	N	N	N	N	N	N	N	N	N
Communication circuits or systems	N	N	N	N	N	N	N	N	N	N	N	N
Electronic facility physical security systems	N	N	N	N	N	N	N	N	N	N	N	N
Audio or video systems	N	N	N	N	N	N	N	N	N	N	N	N
Aviation systems	N	N	N	N	N	N	N	N	N	N	N	N
Outdoor landscape lighting systems supplied by an existing power supply 20 volts or less per NEC 411	N	N	N	N	N	N	N	N	N	N	N	N
Indoor lighting systems supplied by an existing power supply 20 volts or less per NEC 411	N	N	N	N	N	N	N	N	N	N	N	N
Process control systems	N	N	N	N	N	N	N	N	N	N	N	N
Class 2 or class 3 remote control circuits that control circuits or systems other than class 2 or class 3	N	N	N	N	N	N	N	N	N	N	N	N
Class 2 or class 3 remote control circuits that control circuits or systems containing physically unprotected circuits other than class 2 or class 3	N	N	N	N	N	N	N	N	N	N	N	N
Class 2 intradwelling irrigation systems	N	N	N	N	N	N	N	N	N	N	N	N
Work not performed by employees of a contractor	N	N	N	N	N	N	N	N	N	N	N	N
Residential class 2 or class 3 remote control wiring	N	N	N	N	N	N	N	N	N	N	N	N
Class 2 or class 3 remote control applications other than security or fire alarm	N	N	N	N	N	N	N	N	N	N	N	N

Note: This table is for general guidance purposes only. Final determination of the licensing and inspection requirements may vary based upon the specific circumstance or the specific application involved.

How will competency criteria impact construction code inspectors?

In accordance with Minnesota Statutes 16B.655 that was adopted May 8, 2006, the Department of Labor and Industry (DLI) is developing rules regarding construction code inspectors. First, an advisory committee provided recommendations to the Commissioner of the Department of Labor and Industry regarding minimum competency criteria for construction code inspectors, educational program criteria and continuing education unit requirements. Currently, some proposed rule language and a statement of need and reasonableness (SONAR) are being drafted and reviewed by the DLI commissioner and legal staff. Questions addressed during the development process include:

Will this rule affect construction code inspectors currently working for a municipality?

A construction code inspector working for the same municipality before and after the rule is effective will not be affected. However, construction code inspectors hired by a different municipality after the rule is effective, who are not certified by the State of Minnesota as a building official or building official limited, will need to meet the rule criteria within one year of the date of hire.

Will requirements to be recognized as a combination inspector be changed by the rule?

Yes, there will be additional criteria to be met to show competency in more than one of each of the disciplines

Will a construction code inspector be required to participate in continuing education and will the Department of Labor and Industry (DLI) keep records of continuing education hours?

After Jan. 1, 2008, a construction code inspector will be required to take continuing education training as outlined in the rule. DLI is not certifying construction code inspectors nor keeping track of education hours required for the competency rule. It is the responsibility of the inspector and municipality to do so.

Will I need to take a certification test to become a construction code inspector?

No, there is no certification involved with this rule, DLI was not given statutory authority to do any kind of testing or certification for construction code inspectors. Several national organizations provide certification tests and the rule will allow these as one way to show competency.

This rule goes into effect Jan. 1, 2008, and will apply to construction code inspectors hired on, or after that date. Within one year of the date of hire, the construction code inspector will need to meet the criteria set forth by the rule established by the commissioner. Persons currently certified as a Building Official or Building Official Limited by the State of Minnesota will be exempt from this rule.



2008 National Electrical Code proposals may change swimming pool bonding grid rules

The 2008 National Electrical Code (NEC) will be published later this year and the rules for equipotential bonding grids will most likely be changing again due to several proposals that were submitted during the 2008 NEC code change cycle.

Many people in the swimming pool and electrical industry may not be aware of Tentative Interim Amendment (TIA) 05-2 which was published by the National Fire Protection Association (NFPA) for NFPA 70 (2005 NEC). It is anticipated the 2008 NEC will be adopted as part of the Minnesota Building Code in July 2008. However, until then, the 2005 NEC in conjunction with TIA 05-2 will continue to be applicable.

TIA 05-2 became effective Aug. 18, 2005. This TIA relates to section 680.26 of the 2005 NEC and the rules for swimming pool equipotential bonding grids. The published TIA is available at www.nfpa.org/assets/files/PDF/CodesStandards/TIAErrataFI/TIA70-05-2.pdf.

In summary, there are three main elements in the TIA:

1. The equipotential bonding grid shall conform to the contours of the pool and shall extend within or under paved walking surfaces for 3 feet horizontally beyond the inside walls of the wall;
2. An exception states that the equipotential bonding grid shall not be required to be installed under the bottom of or vertically along the walls of vinyl lined polymer, fiberglass composite, or other pools constructed of nonconductive materials. Poured concrete, pneumatically applied (sprayed) concrete and concrete block, with painted or plastered coatings, shall be considered conductive material and;
3. Where deck-reinforcing steel is not an integral part of the pool, the deck-reinforcing steel shall be bonded to other parts of the bonding grid using a minimum 8 AWG solid copper conductor.



Building official designation

Congratulations to the state's recently designated municipal Building Officials:

- **Dean Busse**
City of Nicollet
- **Kyle L. Christensen**
City of Sartell
- **Michael A. Johnson**
City of Gem Lake
- **Jack Kramer**
Lent Township
- **James R. Schneider**
City of Center City
City of Rush City
- **Russell A. Wahl**
City of Mendota
- **Don R. Winter**
City of St. Cloud



Building officials: help us keep our database current

The Building Official list is online at www.doli.state.mn.us/buildingcodes.html.

If a change is needed, please contact Peggi White at peggi.white@state.mn.us.

Official notices are sent to Building Officials via e-mail. Please send e-mail addresses or phone number changes to bcsd.response@state.mn.us.

Municipalities should report Building Official designation changes to Peggi White at CCLD. The form is online at www.doli.state.mn.us/bc_local_government.

Bonding requirements for corrugated stainless steel tubing

As part of an interim settlement of a class action lawsuit brought against manufacturers of corrugated stainless steel tubing (CSST) used for gas piping, manufacturers of CSST have issued technical bulletins related to bonding of CSST. Manufacturers of CSST named in the lawsuit include: Titeflex Corporation, manufacturers of GasTite; Ward Manufacturing, manufacturers of WARDFLEX; OmegaFlex, Inc., manufacturers of TracPipe and TracPipe PS-II; and Parker Hannifin. Technical bulletins and information related to the class action lawsuit can be accessed online at www.pddocs.com/csst/updates.aspx#.

Although similar, each manufacturer has developed their own requirements for bonding of CSST manufactured by their company. These requirements become part of the manufacturer's installation instructions and subsequently compliance is required by the State Mechanical Code.

Specific manufacturers of CSST may have requirements that differ from this summary and should be contacted, or their most recent information accessed, to ensure compliance with their specific requirements.

The bonding of CSST is electrical work and must be performed in accordance with electrical licensing laws, Minnesota Statutes 326.01 and 326.241 – 248 and Minnesota Rules Chapter 3800.

The bonding requirements specified by manufacturers that are in addition to those found in the National Electrical Code are enforceable under the State Mechanical Code. There is no separate electrical

inspection required for this additional bonding and electrical inspection is performed as part of the inspection of other electrical work being performed on the premises.

The following is a summary of the general requirements:

1. CSST must be bonded to the grounding electrode system of the premises. This bonding requirement is in addition to the bonding requirement of section 250.104 (B) of the National Electrical Code and section 309 of the State Fuel Gas Code, which allow the equipment grounding conductor of the feeder or branch circuit to bond the gas piping at the supplied equipment.
2. The bonding connection must be made nearest the point of entrance of the gas piping to the premises.
3. Bonding connections must not be made to the tubing itself, rather to associated metal fittings, piping or manifolds that are directly connected to CSST.
4. Bonding connections must be made by using approved pipe grounding clamps or approved wire connectors in accordance with National Electrical Code section 250.70.
5. The bonding conductor should be as short as possible and bond the gas piping system directly to the premises grounding electrode system or electrical service equipment enclosures or raceways.
6. The size of the bonding conductor should be no smaller than 6 AWG copper.

Plumbing plan review turnaround improving

The unit is beginning to see improvements in turnaround time for plan review with the addition of new staff.

The demand for plumbing plan reviews has increased 18 percent during the past eight years. However, the number of plans submitted to the Plumbing Plan Review unit began to decrease last fall, resulting in 243 fewer requests in 2006 than in 2005.

Fiscal year	Plans
2006	3,026
2005	3,269
2004	3,079
2003	2,825
2002	2,587
2001	2,507
2000	2,564
1999	2,472

Licensing questions? Check our Web site

CCLD is currently processing 15,000 residential contractor licenses and 6,000 master electrician licenses through April 1, 2007. The division's ability to handle inquiries by phone is limited and customers are strongly encouraged to first review licensing information online at www.doli.state.mn.us/cclld.html for the answer to their questions or send an e-mail message via DLI.License@state.mn.us.

Plumbing Code revision process has begun

Minnesota
Amendments to
Chapter 4715



The process of updating and adopting revisions to the Minnesota Plumbing Code began with the formation of an advisory committee and publishing notice of intent to revise the code. CCLD hopes to begin the rulemaking process during 2007 with a goal of completing the revision in 2008. The last code revisions were adopted in 2003.

The Minnesota Plumbing Code Advisory Committee (formerly called the Minnesota Department of Health Plumbing Advisory Council) was established to discuss and take input from representatives of industry and local government relative to new products, materials and methods.

More information about the Chapter 4715 advisory committee is online at www.doli.state.mn.us/pe_committee.html.

The following organizations have been asked to participate and assist the department staff in review of code changes, new products, materials and methods.

- American Society of Plumbing Engineers, Minnesota Chapter
- Minnesota Association of Plumbing, Heating and Cooling Contractors
- Minnesota Association of Plumbing and Mechanical Officials
- The Minnesota Chapter of Associated Builders and Contractors, Inc.
- Minnesota Mechanical Contractors Association
- Minnesota Pipe Trades
- Minnesota Water Quality Association
- Minnesota Utility Contractors Association
- Association of Minnesota Building Officials
- American Society of Sanitary Engineers
- American Society of Mechanical Engineers
- Minnesota Onsite Wastewater Association

In addition to the above entities, the following organizations are providing technical advisors to the advisory committee:

- Minnesota Department of Health
- Minnesota Pollution Control Agency
- University of Minnesota, Minnesota Extension Services

Have an electrical complaint?

Report electrical complaints in a proactive manner by recording violations in the form of a formal complaint. View all disciplinary actions, revocations, suspensions and the tenant complaint information listed on the Web site at www.electricity.state.mn.us/Complain/index.html.

CCLD staff changes

Scott Sawyer has been hired as a new plan review engineer in the Plumbing Plan Review unit. He is a registered professional engineer and LEED certified. Sawyer joins CCLD after working as a plumbing and mechanical system designer for LKPB, HBI and Dunham Associates. He is not entirely new to the unit as he was with the Plumbing unit at the Department of Health ten years ago.

Sign up to receive rulemaking updates

DLI rulemaking information for CCLD is online at www.doli.state.mn.us/rulemaking_activity.html.

To receive notices of agency rule proceedings register at www.doli.state.mn.us/docs/rules_reqnotices.doc or print the Word document from the Web site, complete it and mail it as directed.

Construction Codes and Licensing sponsors two seminars

1 Draft Minnesota Rules and General Code Adoption Information Seminar April 3 – May 23, 2007

The seminar will focus on proposed language for Minnesota Rule Chapters 1303, Minnesota Provisions; 1346, Mechanical Code; and recently adopted 1307, Elevators and Related Devices. It will explain the importance of each rule and how each rule potentially affects the construction industry. The seminar is designed for building officials, inspectors, designers, contractors, installers, skilled trade persons and other individuals affected by changes to construction codes or interested in understanding the rulemaking process.

This one-day seminar will also include a presentation about Minnesota Rule Chapter 1300 which includes its purpose, application and scope as it relates to building safety. Topics will include alternate methods, materials, permit and submittal requirements and inspections.

Seminars will be conducted in Brooklyn Center, Burnsville, Detroit Lakes, Duluth, Maplewood, North Mankato, Plymouth, Rochester and St. Cloud.

2 Manufactured Structures Seminar April 10 – May 3, 2007

This one-day seminar will focus on HUD Manufactured Homes and the Federal HUD proposed and final rules. Attendance is highly recommended for dealers, installers and manufacturers because attendance will be reviewed during future license and registration renewals. Manufactured homes salespersons, service personnel, building officials, inspectors, general contractors, park owners and other interested individuals are encouraged to attend.

The Minnesota law changes to 327B and 327.31–327.35 along with the proposed rule changes to Minnesota Rules Chapter 1350 will be discussed. CCLD staff will review licensing requirements for manufactured home installers, dealer file records and continuing education requirements. Presentations will cover installation standards, installer certifications, installer's seals and certificates. Participants will learn about alternate foundation systems including types, submittals, reviews and the approval process, applying alterations to manufactured homes and the impact on the construction label.

The seminars will be conducted in Austin, Burnsville, Detroit Lakes, Grand Rapids, Maplewood, North Mankato and St. Cloud.

Register today

Registration is available online at www.doli.state.mn.us/bc_education.html for both seminars. Seminars are site specific and limited enrollment is available at each site. The cost is \$35 which includes each participant's seminar fee, lunch and handout materials. Early registration is encouraged.

