

CCLD REVIEW

Construction Codes and Licensing Division • Minnesota Department of Labor and Industry • Summer 2018

Fall seminars: Ventilation and fire protection for commercial kitchens

Dates for the seminar, conducted throughout Minnesota, will be announced soon

The topic of DLI's Fall Seminar Series is commercial kitchen ventilation provisions and fire protection of commercial kitchen hoods and cooking equipment. Seminar dates, additional information and registration will be available soon at www.dli.mn.gov/cclD/education.asp.

The food industry and commercial kitchen equipment are changing at a rapid pace, which has led to misunderstandings about code and safety requirements. This seminar will address commercial kitchen ventilation equipment along with commonly misunderstood code provisions and industry-accepted standards.

Continuing education

Building officials and plumbers will receive six hours of continuing education credit for attendance (non-plumbing code credit).

Building Official Limited and Accessibility Specialist Training Program

The next training program for prospective building official limited and accessibility specialists is Oct. 29, 2018, at DLI's St. Paul office. The training prepares individuals for a career in the building code enforcement industry.

Is the training required?

Yes. Those seeking building official limited or accessibility specialist certification are required to attend training. The building official limited course is five days and includes accessibility specialist training. The accessibility specialist segment is one day and covers building code accessibility requirements.



Are there prerequisites required to attend the building official limited training?

Yes, at least 30 points are required to attend the building official limited training. Points are awarded as shown on the second page of the [Application for Municipal Building Official Certification](#). The exam application, fee and course enrollment form must be submitted to attend the program.

Is there a prerequisite to attend the accessibility specialist training?

No, but the exam application, fee and course enrollment form must be submitted.

Attend the training

View more information about the certification overview and course enrollment forms at www.dli.mn.gov/cclD/official.asp.

Register now for Building Official Forum 2018

No cost to attend, includes continuing education credits

The Construction Codes and Licensing Division (CCLD) will host its fourth annual Building Official Forum from 9:30 a.m. to noon, Friday, June 29, 2018, at the Arrowwood Resort and Conference Center in Alexandria, Minnesota.

This year's forum includes a preview into the development of CCLD's Building Official Apprenticeship Program, a regional review of Minnesota's construction activity trends and an open discussion about changes to the 2018 "I" codes.

There is no cost to attend the event. Breakfast is provided and begins at 9 a.m. The event is approved for 2.5 continuing education credits for building officials.

Learn more and register at www.dli.mn.gov/cclld/education.asp.

CCLD Review is a quarterly publication of the Minnesota Department of Labor and Industry.

Receive email notification when an issue is available by [subscribing online](#).

Contact information

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Visit the [Contact Us](#) page

Licensing information

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Business/contractor licenses and bonds:

651-284-5034

(Including: electrical, HPP, plumbing, residential, manufactured structures, mechanical bonds, technology system, water conditioning)

Personal licenses and certificates:

651-284-5031

(Including: boiler engineers, electricians, plumbers, power limited technicians, pipefitters, unlicensed individuals, building officials)

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Schedule of board and council meetings

Below is a schedule of board and council meetings at DLI. Visit www.dli.mn.gov/boards.asp to view meeting minutes, agendas, rulemaking documents and schedules for these meetings and additional boards and councils.

Board of Electricity www.dli.mn.gov/boe.asp

- July 10, 2018
- Oct. 9, 2018

Board of High-Pressure Piping www.dli.mn.gov/bohpps.asp

- July 12, 2018
- Oct. 11, 2018

Plumbing Board www.dli.mn.gov/pb.asp

- July 17, 2018
- Oct. 16, 2018

Construction Codes Advisory Council www.dli.mn.gov/ccac.asp

- June 21, 2018

Meeting dates and times may change. Visit www.dli.mn.gov/boards.asp for current listings.

Rulemaking notices

Sign-up to receive notices of agency rule proceedings from DLI. Visit www.dli.mn.gov/rulemaking.asp for details and to register.

Advisory groups complete review of 2018 model codes

Technical Advisory Groups (TAGs) have completed their review of the 2018 model building codes.

The Construction Code Advisory Council (CCAC) established the advisory groups to review seven of the 2018 I-Codes and make recommendations for their potential adoption with amendments to Minnesota Rules. Three additional TAGs reviewed administrative requirement, fire and building code compatibility and the structural provisions of the I-Codes. The TAGs completed their review in March.

Review recommendations and comment

A report about the TAG review of the 2018 I-Codes was submitted May 15 to the CCAC, stakeholders and interested parties to allow the opportunity for input prior to June 1. The CCAC will review and comment on the report and stakeholder comments at its June 21 meeting. The meeting is open to the public and begins at 9 a.m. View the report of the TAG review of the 2018 I-Codes at www.dli.mn.gov/ccac-tag.asp.

Board of High Pressure Piping completes code adoption

The Board of High Pressure Piping Systems recently completed the adoption of updated model codes through the rulemaking process.

Adopted by reference within Minnesota Rules chapter 5230, there are five national codes that govern the fabrication and installation of high pressure piping systems in Minnesota, and these editions became effective May 14, 2018:

- **Code for Steam or Heating Media Piping Systems:** ASME B31.1-2016 Power Piping
- **Code for Ammonia Refrigeration Systems:** ANSI/IIAR 2-2014 Standard for Safe Design of Closed-Circuit Ammonia Refrigeration Systems, and ASME B31.5-2016 Refrigeration Piping and Heat Transfer Components
- **Code for Bioprocess Piping:** ASME BPE-2016 Bioprocessing Equipment
- **Code for Welding of High Pressure Piping:** ASME Section IX-2017 Welding, Brazing, and Fusing Qualifications

Downloads

View [Chapter 5230, Board of High Pressure Piping Systems rules for Pipefitters; Power Piping Systems](#).

High Pressure Piping Laws and Rules can be purchased from [Minnesota's Bookstore](#).



Bleacher-safety requirements apply throughout Minnesota

Statewide, all places of public accommodation that contain bleachers must comply with bleacher-safety requirements.

Bleachers include any tiered or stepped seating facility, whether temporary or permanent, in places like sports or entertainment arenas, gyms, auditoriums, special event centers in public parks and other facilities for public assembly.

A new fact sheet that outlines Minnesota's requirements to ensure safe bleachers is at www.dli.mn.gov/CCLD/PDF/fs_bleachers.pdf.

Townhouse or two-family dwelling?

Fact sheet outlines differences between the two

Two-family dwellings and two-unit townhouses (or twin homes) are differentiated based on property, separation and utility services.

A fact sheet from the Construction Codes and Licensing Division explains the difference between the two types of units and why it is important they are properly described.

View the fact sheet at
www.dli.mn.gov/cclld/pdf/fs_townhouse.pdf.



License enforcement: Plumbing contractor fined \$15,000

- A licensed plumbing contractor from Maple Grove, penalized in 2011 and 2014 for failing to supervise its registered unlicensed employees and allowing employees with expired registrations to perform plumbing work, was found in 2018 to be improperly supervising its registered unlicensed employees. The contractor was censured and ordered to pay a \$15,000 fine of which \$10,000 was stayed contingent on the contractor's compliance with requirements of the enforcement action.
- An unlicensed handyman from Bloomington was found to be engaged in plumbing and residential building contracting work. He was ordered to cease and desist from all unlicensed activity and fined \$5,000, of which \$4,500 was stayed based on compliance with the licensing order.
- A licensed Andover electrical contractor was censured and fined \$10,000, of which \$8,000 was stayed, for its failure to register its unlicensed electricians, failure to properly supervise its registered unlicensed electricians and failure to properly apply for electrical permits.
- Two unlicensed individuals from Bemidji, who purchased, renovated and then resold manufactured homes, were found to have engaged in unlicensed manufactured home sales, unlicensed residential building contracting, unlicensed plumbing and failure to cooperate with investigators' request for information. They were ordered to cease and desist from all unlicensed activity and fined \$12,500.
- A licensed residential building contractor from Minneapolis engaged in unlicensed plumbing and electrical work on its projects. The contractor was fined \$15,000, of which \$12,000 was stayed contingent on no future unlicensed activity.



Enforcement actions

View enforcement and license actions levied against licensees.

More information

Summaries of all final CCLD enforcement actions are available at www.dli.mn.gov/CCLD/Enforcement.asp. Questions about specific enforcement actions should be directed to (651) 284-5069 or dli.contractor@state.mn.us.

Registered unlicensed workers must report work experience at renewal

All registered unlicensed electricians, plumbers, elevator constructors and high pressure piping pipefitters must submit a summary of their work experience for the previous year when they renew their registration each year. Report work experience on a form signed by the responsible licensed individual (master) for the worker's employer. The completed form must then be uploaded with the worker's online registration renewal, emailed to dli.license@state.mn.us or mailed. Forms are available at www.dli.mn.gov/cclD/FormsRegistration.asp

Failure to report work experience may result in a worker's experience not being counted toward the minimums required to take a journeyworker license exam.

Registered unlicensed electricians and power limited technicians must also complete two hours of **DLI-approved continuing education** before renewing the registration. Renewing a registration without continuing education may result in suspension of the registration and a fine of at least \$250.

Check your work experience

Work experience that has been reported to us can be checked at <https://secure.doli.state.mn.us/lookup/licensing.aspx>. Employers do not report work experience to us. Employers are required to track work experience, but it is the responsibility of the worker to make sure their experience is reported.

Questions?

Contact us at dli.license@state.mn.us or 651-284-5031.

Subcontractors must be registered or licensed with DLI

All contractors who provide commercial or residential building construction or improvement services must either be licensed by DLI or registered in the **Construction Contractor Registration Program**.

Why contractor registration?

The Contractor Registration Program helps DLI and other state agencies investigate worker misclassification. Misclassification occurs when a contractor has employees but treats them as independent contractors.

Instead of providing workers' compensation and unemployment insurance and withholding payroll and FICA taxes, some employers pay their workers cash or give them 1099s instead of W-2s, denying them the rights and benefits that employees are entitled to under state and federal laws.

An individual worker or owner of a business cannot be treated as an independent contractor unless they are licensed by DLI or registered in the Contractor Registration Program, and they meet all nine factors of the nine-factor test (www.dli.mn.gov/CCLD/register.asp). An owner of a business entity is presumed to be an employee and not an independent contractor if that business entity is not registered with the department and registration is required.

Verify a registration

Check a license or registration at <https://secure.doli.state.mn.us/lookup2/licensing.aspx>. All contractor registrations begin with the letters "IR" and are followed by six digits.

Questions?

More information, registration and renewal are available at www.dli.mn.gov/CCLD/register.asp. Contact us at 651-284-5074 or dli.register@state.mn.us for help with questions.



Minnesota Plumbing Code frequently asked questions and answers

Is there a maximum allowable hot water heater/storage temperature or thermostatic setting on a water heater? What are the temperature limitations for various plumbing fixtures?

Except for point-of-use temperature limitation on plumbing fixtures listed below, there is no requirement in the Minnesota Plumbing Code that addresses temperature in hot water storage or temperatures in domestic hot water distribution systems. Temperatures in domestic hot water storage and hot water distribution systems must be designed for the intended application and be installed and maintained in accordance with the design and manufacturer's installation instructions and recommendations.

Hot water storage designs should also consider a temperature that minimizes Legionella bacteria growth. More information about Legionella management plans for building water systems is at www.dli.mn.gov/CCLD/PDF/review44winter17.pdf#page=4.

To address scalding concerns, the Minnesota Plumbing Code includes maximum thermostatic mixing valve temperatures for point-of-use protection:

| Fixture | Maximum mixed temperature | Control valve standards |
|--------------------------------|---------------------------|--|
| bathtubs and whirlpools* | 120F | ASSE 1070 |
| bidets | 110F | ASSE 1070 |
| lavatories in public restrooms | 110F | ASSE 1070 |
| showers and tub-showers | 120F | ASSE 1016 or ASME A112.18.1/ CSA B125.1 |
| gang showers** | 120F | ASSE 1069 |

Notes:

1. Water heater thermostats are not considered a control for meeting these requirements.
 2. A thermostatic mixing device listed to Standard ASSE 1017 is not acceptable for meeting these requirements.
- * Except where protection is provided by an ASSE 1016 or ASME A112.18.1 control valve as part of a tub-shower combination.
- ** This is a single temperature-controlled water supply line for individual or multiple showers where users have no control of temperature adjustments.

Can an indirect waste receptor like a standpipe be installed under a kitchen cabinet or similar with doors, for receiving indirect waste? Does this installation meet the requirements of “readily accessible” and the restriction on cupboards under Minnesota Plumbing Code, Section 804.1?

Yes. The definition of “readily accessible” in Minnesota Plumbing Code, Section 203.0, means having a direct access without the necessity of removing a panel, door or similar obstruction. Therefore, opening a cabinet door is considered readily accessible since the door is opened without the use of tools. In addition, a cabinet below a plumbing fixture where plumbing piping exists is not considered a cupboard. See Minnesota Plumbing Code Sections 802.1 and 804.1 for additional requirements and approvals of indirect waste receptors.

Can any purple primer be used for solvent cement joints in PVC pipe and fittings for drain, waste and vent systems?

No. Purple color primer must be listed to ASTM F656 to comply with the Minnesota Plumbing Code, Section 705.7.2. Purple primer can be verified for compliance with ASTM F656 by checking the listing identification label on the product.

Minnesota Building Code frequently asked questions and answers

CONSERVATION CODE

When a building's occupancy classification is changed, must the building be brought up to current building code requirements for new construction?

Typically no. Through the “prescriptive compliance method” and with the approval of the building official, the Minnesota Conservation Code for Existing Buildings allows a change of occupancy to an equal or lower life safety and fire risk hazard without requiring major changes to the building systems. As a result of modifications, existing conditions may not be less conforming to the current code than before the changes were made. This is the easiest and most cost-effective compliance method.

Through the “work area compliance method,” changes in occupancy to higher hazard groups may be accomplished, in many cases with reduced requirements to the building upgrades.

FIRE PROTECTION SPRINKLING

When are fire sprinklers required in a building?

There are three typical considerations in new construction when a building is required to be sprinkled:

1. If a municipality has adopted Minnesota Rule 1306 and the change of occupancy is within the scoping.
2. Where the occupancy has special requirements [Minnesota State Building Code (MSBC), Section 903].
3. To achieve an increase in allowable floor area or building height (MSBC, Chapter 5).

By dividing the building with fire barriers (Section 707.3.10), separate fire areas are created and sprinkling may be avoided due to building compartmentalization (Section 903). By dividing a building with fire walls, separate buildings are created and sprinkling may be avoided due to reduced building size (Chapter 5 and Section 903).

What is the difference between a fire wall and a fire barrier?

Fire walls must have sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall. They must also extend beyond the roof and beyond the exterior walls or meet exceptions. Fire barriers do not have structural stability requirements, nor are they required to extend beyond the roof deck or exterior walls.

When an existing building has a change in occupancy that requires the new occupancy to be sprinkled, does the entire building need to be sprinkled? Not necessarily.

Change in occupancy to an equal or lower fire and life safety hazard level: The building official may approve the change in occupancy without requiring sprinkling through the Minnesota Conservation Code for Existing Buildings using the prescriptive compliance method. This is possible even if the occupancy would require sprinkling if constructed as new. Minnesota Rule 1306 has provisions for existing buildings and would override Minnesota Rule 1311 if adopted locally.

Change in occupancy to a higher fire and life safety hazard level:

- The provisions for sprinkling found in the MSBC Chapter 5 apply to the building, and provisions in MSBC Section 903 apply where the new occupancy group occurs.
- Sprinkler requirements expand to the means of egress system on the floor where the change of occupancy occurs when there are multiple tenants on the floor, or the means of egress on that floor serves more than 30 occupants.
- When the change of occupancy work area expands to more than 50-percent of the floor area, the entire floor must be sprinkled with the exception of separate tenant spaces.
- When the work area expands to more than 50-percent of the total building area, high-rise buildings must be sprinkled in all work areas, and waste and linen chutes must be sprinkled.

Free online solar training

The Interstate Renewable Energy Council recently launched online interactive solar training for local code officials that is, for a limited time, offered at no cost.



The course is updated to the 2017 National Electrical Code and the most current international building, residential and fire codes. [Read more about the training here.](#)

More about solar

DLI offers solar photovoltaic resources online. Visit www.dli.mn.gov/CCLD/ElectricalSolar.asp for the most recent information.

Save the date for Annual Institute

The University of Minnesota Annual Institute for Building Officials is Jan. 9-24, 2019, at the Earle Brown Heritage Center, Brooklyn Center.

The electrical sessions are scheduled for Jan. 9-10. Visit <https://ccaps.umn.edu/annual-institute-building-officials> for more information.

Attendees receive up-to-date information about Minnesota codes and amendments, best practices for inspection and code administration, information about new products and professional development skills.

New electrical codes and standards bulletins available

Bulletin: Livestock Waterers and Equipotential Planes

The National Electrical Code (NEC) requires installation of an equipotential bonding plane where livestock can stand while accessing metallic equipment. An equipotential plane is an area where a wire mesh or other conductive elements are embedded in or placed under concrete, bonded to all metal structures and fixed nonelectrical equipment that may become energized, and connected to the electrical grounding system to minimize voltage differences within the plane and between the plane, the grounded equipment and the earth. Read more at www.dli.mn.gov/CCLD/PDF/eli_bulletin_livestock_waterers.pdf.

Bulletin: Fuel Dispensing: Installations, Retrofits and Replacements

Special disconnecting requirements at motor fuel dispensing facilities ensure safety for personnel and station equipment during emergencies, maintenance and service activities. Generally, the purpose of the disconnecting requirements is to remove any possibility of remotely starting the fuel dispenser(s) which could accidentally release product, and to eliminate unintended electrical energy that could ignite any hazardous atmospheres. Read more at www.dli.mn.gov/CCLD/PDF/eli_bulletin_fuel_dispensing.pdf.

Recently revised is a code and standard bulletin about use of Type NM cable in garages and accessory buildings and multi-family dwellings. Read the revised bulletin at www.dli.mn.gov/CCLD/PDF/eli_bulletin_nm.pdf.

View all of the bulletins at www.dli.mn.gov/CCLD/ElectricalCodes.asp.

Don Nemeth, longtime electrical area representative, retires

After 27 years of dedicated service to Minnesota as a DLI electrical area representative, Don Nemeth retired June 1, 2018. His work area included counties in central and west-central Minnesota.

Nemeth has many decades of electrical industry service as an electrician, electrical contractor, electrical inspector and electrical instructor. His dedication and contributions to the electrical industry and electrical inspection have been extraordinary. Nemeth rarely leaves home without a copy of the National Electrical Code, so even in retirement he most likely will remain engaged in the electrical industry in some capacity. We are very happy for him and wish him well in retirement.

View directories of electrical area representatives and inspectors at www.dli.mn.gov/CCLD/ElectricalInspect.asp.

Stay in touch with need-to-know news; sign-up for email lists

Stay up-to-date with DLI by signing up for newsletters and email lists. Some of the topics include:

- building officials
- permit technician news
- labor standards
- rulemaking
- workers' compensation
- prevailing wage
- apprenticeship
- and more.



Sign up at
www.dli.mn.gov/EmailLists.asp

Free on-site safety and health consultations available

DLI offers a free consultation service called MNOSHA Workplace Safety Consultation to help employers find out about potential hazards at their worksites, improve safety management systems and apply for grants to abate safety standards.

The program targets small, high-hazard businesses. It is separate from the OSHA Compliance inspection activities and no citations are issued as part of a consultation visit.

Learn more and request a consultation

- On the web: www.dli.mn.gov/WSC/Assistance.asp
- Email: osha.consultation@state.mn.us
- Call: 651-284-5060

