

Are you a disaster assistance volunteer?

DLI coordinates assistance efforts when disasters – like a flood or tornado – strike.

The Department of Labor and Industry recruits code professionals as disaster assistance volunteers who offer their expertise when disaster strikes.

The list of disaster assistance volunteers is used to link code officials and other professionals with state and county emergency management officials and affected regional code officials.

DLI works cooperatively with the Association of Minnesota Building Officials to develop and improve the Disaster Preparedness Manual for Building Officials. A revised edition is available on DLI's website.

More information from DLI

- [Disaster preparedness homepage](#)
- [Memo outlining disaster preparedness duties](#)
- [Disaster preparedness volunteer form.](#)
- [Flood resources from DLI](#)



DLI staff help coordinate disaster preparedness volunteers to assist Minnesota communities when a disaster such as a flood or tornado strike.

Manufactured structures

Changes to manufactured home installation inspections

Both Minnesota and Federal law require installations of manufactured homes to be inspected by qualified persons in order to verify the installation complies with applicable state and federal requirements.

Designated building officials are required to issue permits and inspect installations of manufactured homes located within areas of their jurisdiction. In areas of Minnesota that do not have a designated building official, plan approval and inspections are the responsibility of DLI's Construction Codes and

Licensing Division.

Effective May 1, 2011, CCLD staff will no longer perform manufactured home installation inspections.

Instead, in accordance with Minnesota's HUD-approved installation program, installers of record (licensed installers or consumers) must contract [with third-party inspectors](#) for inspections of new and used manufactured homes installed in non-code administered areas of the state.

More details about the changes

- Read the full bulletin and view a list of third party inspectors at www.dli.mn.gov/CCLD/ManufacturedBulletins.asp
- Call (651) 284-5092
- View more manufactured structures information on DLI's website at www.dli.mn.gov/CCLD/Manufactured.asp

Requirements for elevators damaged by flood waters

Costly damage to elevator equipment can occur during a flood. This damage may result in the elevator becoming unsafe and presenting a hazard to users.

Owners are advised to **take action to minimize the damage** to their elevators by doing the following if flooding is expected:

- If a flood recall operation is provided by the elevator equipment, have an elevator contractor test it for proper operation.
- Park elevators above the expected flood level when flooding is imminent, and remove all power to minimize the extent of the damage and prevent the elevator from entering the flooded area.

The following **actions are necessary when an elevator or elevator related equipment may have suffered flood damage:**

- Report the damage to CCLD as required by Minnesota Rules 1307.0040 subp. 1. Damage may be initially reported by phone by calling (651) 284-

5071. However, written notice must be provided. Notice is required to be provided within one working day of the incident. The form to report damage is located at www.dli.mn.gov/CCLD/PDF/elev_complaint.pdf.

- Inspection by an **elevator inspector** to determine the condition of the elevator and elevator equipment after the damage has been reported. Inspectors are assigned after the report of damage is received. Inspectors will note the affected areas and order all electrical devices and equipment exposed to the flood damage to be replaced and any mechanical devices and equipment to be replaced or refurbished to “like new” condition. Wire ropes and traveling cables exposed to flood waters cannot be refurbished and must be replaced.
- **Permits and inspections** are required prior to an elevator being returned to service after a flood.

Protect against lightning

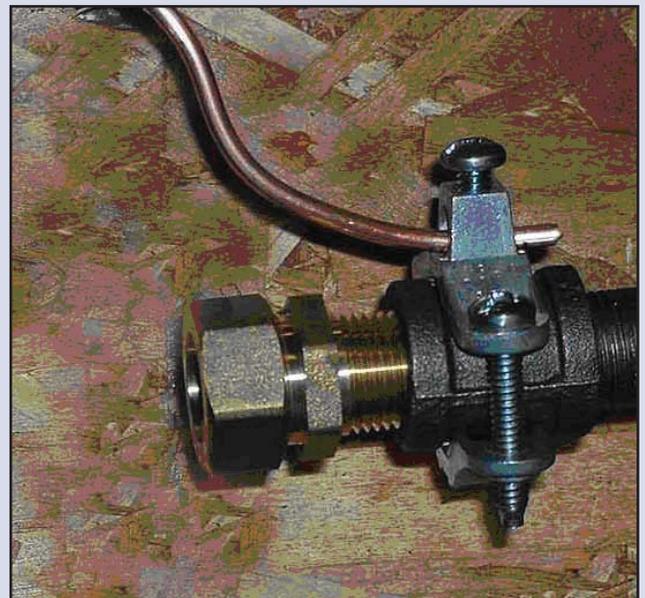
Gas distribution system grounding required

Proper bonding of corrugated stainless steel tubing (CSST) gas distribution systems is necessary to reduce the possibility of damage from lightning-induced surges by eliminating electrical potential between various metallic building systems, including the gas distribution. Firefighters have reported damage to CSST in buildings.

Section 250.104 (B) of the National Electrical Code allows the equipment grounding conductor of the feeder or branch circuit to bond the gas piping at the supplied equipment, but not all gas appliances have an electrical component. Where CSST is used it must be bonded directly to the grounding electrode system of the premises.

The 2009 edition of National Fuel Gas Code 54 (NFPA) requires CSST gas piping systems to be directly bonded to the building’s electrical system:

- **7.13.2 CSST.** CSST gas piping systems shall be bonded to the electrical service grounding electrode



Proper bonding of corrugated stainless steel tubing to protect from lightning-induced surges is required on gas distribution systems.

‘GROUNDING’ continues on Page 3

Manufactured home storm shelter rules in effect

New rules regulating storm shelters in manufactured home parks became effective March 28, 2011. The new rules are based on a document from the Federal Emergency Management Agency and remain similar to the previous rules. View the new rules online at <https://www.revisor.mn.gov/rules/?id=1370&view=chapter>

2011 NEC slated for adoption this summer

The 2011 National Electrical Code is on track to be adopted on or shortly after July 1, 2011. To follow the progress of the rule, view the rulemaking docket www.dli.mn.gov/PDF/docket/1315docket.pdf

Protect against lightning

'GROUNDING' from Page 2

system at the point where the gas service enters the building. The bonding jumper shall not be smaller than 6 AWG copper wire or equivalent.

• 7.13.3 Prohibited Use.

Gas piping shall not be used as a grounding conductor or electrode. This does not preclude the bonding of metallic piping to a grounding system.

This requirement applies to all CSST, without exception. It includes those CSST products with no additional electrical bonding requirements in the manufacturer's installation instructions.

The bonding of CSST products is enforceable under the State Mechanical Code. According to the Minnesota Electrical Act, the installation of the bonding conductor must be performed by a licensed electrical contractor. A separate

electrical inspection permit is not required, as the inspection of the bonding conductor is done with the inspection of other electrical work on the premises.

CSST shall be bonded with approved pipe grounding clamps at the point nearest the entrance of the gas piping to the premises. The connection must be made at a fitting, pipe or manifold that is directly connected to the CSST and not to the tubing or tubing fittings. The bonding conductor shall be no smaller than 6 AWG copper, be as short as possible and connect directly to the premises grounding electrode system or electrical service equipment enclosures or raceways.

Proper bonding of a gas distribution system of CSST requires jobsite coordination, cooperation and communication between the installer of the gas distribution system and the electrical contractor.

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

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

Contact information

CCLD main phone number
(651) 284-5012

Visit the Contact Us page

Licensing information

DLI.License@state.mn.us
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 Code information

Phone: (651) 284-5012
Toll-free: 1-800-657-3944
Fax: (651) 284-5749
TTY: (651) 297-4198

Electrical information

Phone: (651) 284-5026
Fax: (651) 284-5749
DLI.Electricity@state.mn.us

Boiler, High-Pressure Piping, Boats-for-Hire inspection

Phone: (651) 284-5544
Fax: (651) 284-5737
DLI.Code@state.mn.us

Plumbing information

Phone: (651) 284-5063
Fax: (651) 284-5748
DLI.Plumbing@state.mn.us

Residential Building Cont.

Phone: (651) 284-5069
Fax: (651) 284-5749
DLI.Contractor@state.mn.us

Independent Contractor Exemption Cert. information

Phone: (651) 284-5074
DLI.ic@state.mn.us

Popularity of solar water heating systems on the rise

Plumbing Board notes requirements in Plumbing Code for solar systems

With the rise in popularity of solar heating the Plumbing Board would like to emphasize Minn. Rules, Chapter 4715, the Plumbing Code, as it pertains to components of solar water heating systems.

If a heat exchanger is used to transfer the thermal energy from a solar collector through any heat transfer medium to the potable water it must be constructed so a single wall failure does not result in a cross-connection or back siphonage of the of the heat transfer medium into the potable water.

Either a properly designed double-wall heat exchanger must be used or if a single-wall heat exchanger is used, the installation must meet all of the following conditions:

- The heat transfer medium in the solar collector must be either recognized as safe by or approved by the US Food and Drug Administration for food contact.
- The pressure of the heat transfer medium in the solar collector must remain less than the potable water at all times. An automatic device must be installed to maintain the pressure in the heat transfer medium at a level below that of the potable water.
- The equipment must be properly labeled specifying the allowable additives to the solar collector side of the heat exchanger.

If using propylene glycol or RV antifreeze for the heat transfer medium, documentation may be required by the



With the popularity of solar heating on the rise, the Minnesota Plumbing Board notes requirements for installing systems.

administrative authority verifying the solution meets the food grade requirements of the USFDA.

See Minnesota Plumbing Code, Part 4715.1941, for more detailed information regarding heat exchangers, and Part 4715.1940 for proper backflow prevention requirements at www.dli.mn.gov/CCLD/PlumbingCode.asp.

As with all plumbing installations, the potable water connections to the heat exchanger and potable water piping to and from the heat exchanger must be installed by a licensed plumber or individual meeting the requirements of Minnesota Statutes 326B.46, Licensing, Bond and Insurance.

Check with your local administrative authority for applicable permits, fees and/or additional requirements.

» [View meeting agendas and minutes from the Plumbing Board](#)

Social media

Stay current with updates from DLI

- Follow DLI on Twitter at www.twitter.com/mndli
- Sign up for rulemaking notifications affecting CCLD trades and others at www.dli.mn.gov/Rulemaking.asp
- Subscribe to DLI's RSS feed to be instantly notified of news at www.dli.mn.gov/rss/rss.xml
- Sign up for other DLI newsletters focusing on workers' compensation, OSHA and more at www.dli.mn.gov/publications.asp
- View DLI's YouTube channel at www.youtube.com/user/mndli1



Nonwater urinal rules will take effect July 5, 2011

The 2010 legislature passed a bill authorizing the [Plumbing Board](#) to adopt rules for nonwater urinals using expedited rulemaking.

The nonwater urinal rules were adopted by the Plumbing Board, reviewed and approved by the Minnesota Office of Administrative Hearings, and filed with the Secretary of State.

The adopted rules are effective July 5, 2011, and are

available at www.comm.media.state.mn.us/bookstore/stateregister/35_19.pdf

The rules include new definitions, amendments and exemptions to trap seal requirements, and feature an entirely new subpart for nonwater urinal fixtures, part 4715.1410, subp. 2. Specifically, the new subpart addresses fixture standard requirements, design considerations, and maintenance and cleaning requirements.

» View the adopted rules, effective July 5, 2011
www.comm.media.state.mn.us/bookstore/stateregister/35_19.pdf

Summary of requirements for the installation of nonwater urinals

- Fixture construction must meet ASME Standard A112.19.19.
- The vent pipe opening must not be below the weir of the trap (part 4715.0920).

Note: All nonwater urinals, including cartridge and p-trap types, must comply with this requirement. It is noted that at the time of rulemaking, the cartridge type of nonwater urinal did not meet this requirement.

- Where a nonwater urinal is installed, a water supplied fixture must be installed upstream of the nonwater urinal at the end of the same drainage branch.

Note: This requirement will provide a periodic source of flushing of the nonwater urinal drain. This will help minimize the chances of premature failure of the drainage system due to the build-up of urine sediments in the drainage pipe.

- The water distribution system must be piped and properly sized to allow for replacement of nonwater urinals with water-supplied urinals in the future. Dead ends capable of holding stagnant water are not allowed in this piping.

Note: This requirement is necessary in case the building owner decides to replace

the nonwater urinals with water flush urinals. In that event, the water supply will be readily available for the water supplied urinals.

- Each nonwater urinal must be separately trapped by a nonpetroleum liquid seal that is lighter than water.

Note: This requirement protects against sewer gas escape and evaporation of the trap contents.

- Metallic traps or traps with elastomeric membranes are prohibited.

Note: Metallic traps deteriorate in the presence of urine waste and are therefore prohibited.

- The owner of the nonwater urinal must ensure the urinal is cleaned and maintained in strict compliance with the manufacturer's requirements.

Note: Nonwater urinal fixtures require a different type of maintenance than the typical water supplied urinal. This requirement will help to assure proper urinal functioning and will help prevent odors and unsanitary and unhealthy conditions resulting from nonwater urinal use.

Plumbing code compliance bond to be replaced

All plumbing contractors, restricted plumbing contractors and pipe laying contractors must file the new, combined bond for licensing after Jan. 1, 2012

Plumbing bond change

All plumbing contractors, restricted plumbing contractors and pipe laying contractors must file a new Plumbing-SSTS Bond for any license or registration period that starts on or after Jan. 1, 2012.

All current plumbing code compliance bonds (plumbing bonds) filed with DLI will expire Dec. 31, 2011. DLI will reject any plumbing bond that is a continuation of a previously filed plumbing bond.

Effective Jan. 1, 2012, for plumbing contractor licenses and pipe-layer-bond filings, the plumbing code compliance bond is being replaced with a new combined Plumbing Code Compliance and Subsurface Sewage Treatment Bond (Plumbing-SSTS Bond) authorized in Minnesota Statutes 326B.46, subd. 2.

All plumbing contractors, restricted plumbing contractors and pipe laying contractors must file a new Plumbing-SSTS Bond for any license or registration period that starts on or after Jan. 1, 2012. All current plumbing code compliance bonds (plumbing bonds) filed with DLI will expire Dec. 31, 2011. DLI will reject any plumbing bond that is a continuation of a previously filed plumbing bond.

The new Plumbing-SSTS Bond form will be available online Aug. 1, 2011, for surety companies to use in preparing their clients' bonds.

The bond shall provide \$25,000 coverage for plumbing work and subsurface sewage treatment work entered into within Minnesota and is for the benefit of people injured or suffering financial loss by reason of failure to comply with requirements of the State Plumbing Code and SSTS laws, rules and ordinances. The period of the bond is two years. However, the expiration date of the bond for licensed plumbing contractors and restricted plumbing contractors will be Dec. 31, 2013, to coincide with the expiration date of their licenses.

[Read a summary of the changes](#)

Pipe-layer bond and insurance filing correction

Change would reinstate existing requirement

DLI is asking the 2011 Minnesota Legislature to correct an inadvertent omission made in its 2010 comprehensive license restructuring to ensure contractors who perform sewer or water service installation are able to file a bond and liability insurance with the department after Jan. 1, 2012.

Under current law, effective Jan. 1, 2012, only licensed plumbing contractors and licensed restricted plumbing contractors will be able to file a bond and liability insurance, which excludes unlicensed contractors performing sewer and water service installations. DLI's proposal corrects this and reinstates the existing bond and liability insurance filing requirement on contractors performing sewer and water service installations.

Anticipating this correction becomes law, unlicensed contractors performing sewer and water service installations will be able to file with the department,

starting in October 2011, their Plumbing Code Compliance and Subsurface Sewage Treatment Bond (Plumbing-SSTS Bond) and certificate of liability insurance for the coverage period starting Jan. 1, 2012. Application materials for filing the Plumbing-SSTS Bond and liability insurance will be available online Sept. 30, 2011.

As part of the application process, contractors will need to identify a contractor contact and responsible individual that completed pipe-layer-certification training, and submit a properly completed bond, a certificate of liability insurance, and a certificate of compliance with Minnesota's workers' compensation laws.

The coverage period on a Plumbing-SSTS Bond filed by an unlicensed contractor performing sewer and water service installation will be 24 months from the effective date of the bond. The bond will not have a set Dec. 31 expiration date, which will be the case with licensed plumbing contractors.

Answers to questions about reporting electrical experience

Reporting change from months to hours will help with consistency

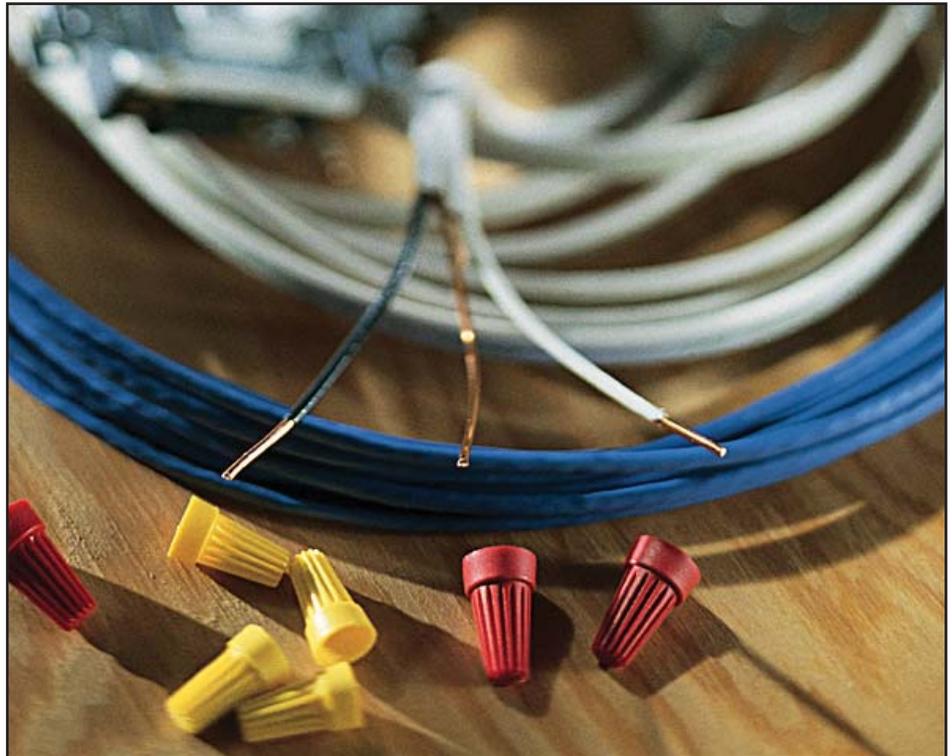
Following implementation of a new procedure requiring registered unlicensed individuals to report their electrical work experience in terms of hours concurrent with their registration renewal, DLI has received questions about the change to measuring working experience in terms of hours rather than months.

According to [Minnesota Statutes 326B.33](#), individuals who apply for an electrical license must have sufficient verified electrical work experience to qualify for the applicable license examination. Specifically, [Minnesota Statutes 326B.33](#) sets the work requirement standard at:

- four years for a class A journeyman electrician;
- 36 months for power limited technician;
- 36 months for an elevator constructor; and
- 48 months for a maintenance electrician.

The [Minnesota Board of Electricity](#) further refined these standards in [Minnesota Rules 3800.3520](#) in terms of months, by setting the minimum and maximum work experience allowed by class of work. [View a table of electrical license classification work experience requirements.](#)

Historically, DLI and the Minnesota Board of Electricity mailed employment verification forms to the applicants' employers requesting verification of their qualifying work experience – and based on the responses – accepted or rejected the examination application. Information verified included dates of employment; whether the employment was full-time



or part-time; and the work by category performed in terms of months, if full-time, or in terms of hours, if part-time.

Procedurally, the [Minnesota Board of Electricity](#) changed how registered unlicensed individuals' qualifying work experience would be verified when it adopted [Minnesota Rules 3800.3520](#) on Oct. 19, 2009.

In addition to completing two hours of continuing education about the National Electrical Code, renewals from unlicensed individuals were required to include verification of employment by the licensed contractor or registered employer with the following information:

- Names of employers during the previous 12-month-registration term;
- Address of each employer;
- Telephone number of each

employer;

- Dates of employment with each employer;
- Class of work performed for each employer; and
- Changes to their registration information (mailing address, phone number, email address).

From Nov. 30, 2009, to Oct. 31, 2010, registered unlicensed individuals were notified about the two-hour continuing education requirement and the employment verification requirement in their renewal notices.

The new renewal procedure that requires reports for continuing education hours and employment verification was implemented for individuals whose registrations expired on and after Nov. 30, 2010.

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Objectives of the new employment verification procedure include:

- incorporating verification into renewal process;
- employers verifying work experience;
- capturing individuals’ full-time and part-time work experience efficiently;
- pre-qualifying individuals for a license examination;
- enabling registration renewal without verifiable work experience.

Work verification with renewal

According to Minnesota Rules 3800.3525, the Minnesota Board of Electricity directs the registered unlicensed individual to provide verification of electrical work experience on the renewal form provided by DLI, which explains why each unlicensed individual is sent an Electrical Work Experience Verification Form with their renewal notice. Pre-filled with a registrant’s name and address, registration number, registration type and registration period being reported, the form may be duplicated and provided to more than one employer to verify work experience during the registration period.

» View a table of [electrical license classification work experience requirements](#)

Employer verification

According to Minnesota Rules 3800.3525, the Minnesota Board of Electricity requires licensed contractors and registered employers to verify the dates of employment and classes of work performed during the registration period by those registered unlicensed individuals who work or worked for them. Using the pre-filled Electrical Work Experience Verification Form, employers verify the registered individual’s dates of employment during the registration period and number of hours the individual worked in each class of electrical work; and provides their name, address, license or registration number, and identifies their responsible individual. The licensed contractor’s or registered employer’s responsible individual signs the verification along with the registered individual. [A universal, blank form is available online.](#)

Electrical work experience

For purposes of qualifying for a license examination, electrical work experience is determined by the number

of years or months of electrical work experience performed by the applicant. To acquire consistent, reliable work experience data, DLI directed employers to verify and record on the Electrical Work Experience Verification Form the number of hours the registered unlicensed individual worked in each of the classes of work up to a total of 2,000 hours in the registration period. As hourly employees, employers are required to record and maintain the hours these individuals worked. Further, employers are required under Minnesota Statutes 326B.33, subd. 12(c) to maintain records establishing compliance with their employment of registered unlicensed individuals. The annual cap of 2,000 hours was taken from a statutory reference (Minnesota Statutes 326B.33, subd. 7(b)) where the legislature equated 2,000 hours as the equivalent of 12 months. Verifying work experience to meet a year or month standard invariably requires employers and DLI to make judgments about time. By reporting hours, the department is attempting to bring uniformity to the process of verifying work experience.

Pre-qualifying for examination

With registered unlicensed individuals verifying their electrical work experience concurrent with the renewal of their annual registration, they are able to document their qualifying work experience with the department before they make application for a license examination.

Determinations to qualify individuals for electrical license examinations will accelerate for applicants whose work experience has already been verified and recorded in conjunction with the renewals of their registration as an unlicensed individual. Applicants who did not get their work experience verified annually in conjunction with their unlicensed individual registration may experience significant delays in qualifying for a license exam as they wait for current and past employers to verify their work experience.

Renewal without verified work experience

Without electrical work experience to verify and a registration to renew, unlicensed individuals may renew their registration by signing and submitting a blank [Electrical Work Experience Verification Form](#) with the registration renewal form and their registration fee.

Common building plan review questions answered by CCLD staff

The questions below are part of an ongoing series featuring frequently asked questions received by CCLD's [Building Plan Review Section](#). The responses are the opinions of the plan review staff and do not represent an official division or State Building Official interpretation.

Q: Are all unisex restrooms required to have a urinal?

A: No. Only unisex facilities provided pursuant exception 4 of SBC 1305.2902, subp. 3 require a urinal. Unisex facilities provided pursuant exception 1-3 do not.

Q: Can I ignore an existing building that is non-compliant for allowable area by placing a fire wall between it and my new addition?

A: No. "Any building plus new addition shall not exceed the height, number of stories and area specified for new buildings." This is in the state-adopted Guideline for the Rehabilitation of Existing Buildings (GREB), as well as SBC 1305.0501. A fire wall is an acceptable method of making a building compliant with allowable area, not avoiding it. One method to deal with an existing non-compliant condition is through the use of a pedestrian walkway in compliance with IBC sec. 3104. Since a pedestrian walkway is considered a "non-building," if used properly, it would allow the new area to be considered a stand alone building instead of an addition.

Q: Is an early childhood family education (ECFE) facility considered a day care for the purposes of the code?

A: If the child's parent or legal guardian is present at all times during the session, then, despite having children below the age of kindergarten, this would be considered a group E occupancy, not a group I-4 day care.

Verify a license

Use DLI's online tools to verify a license, certificate or registration

DLI's online License Lookup tool allows users to check the status of numerous different licenses, certificates, registrations and bonds.

To see the full list of searchable items, visit www.dli.mn.gov/cclid/LicVerify.asp

Or to view a specific searchable database:

- [Click here to verify a personal license](#)
- [Click here to verify a contractor license](#)



License Lookup 