

528 CMR: BUREAU OF PIPEFITTERS & REFRIGERATION TECHNICIANS

528 CMR 2.00: PURPOSE, SCOPE AND DEFINITIONS

Section

2.01: Purpose and Scope

2.02: Definitions

2.01: Purpose and Scope

(1) 528 CMR 2.00 is promulgated pursuant to M.G.L. c. 146, § 82, for the examining and licensing of fire sprinkler contractors, pipefitters, refrigeration technicians and sprinkler fitters.

2.02: Definitions

Pursuant to M.G.L. c. 146, § 81, the following words and terms, when used in 528 CMR shall have the following meanings:

ANSI. American National Standards Institute.

Apprentice Pipefitter. A person who is registered with the Department of Labor Standards and Workforce Development and is learning or working at the business of pipefitting under the direct supervision of a master or journeyman pipefitter.

Apprentice Sprinkler Fitter. Any person other than a fire sprinkler system contractor or a sprinkler fitter who is presently engaged in both learning and assisting in the work being performed on any sprinkler system, and who must be employed by a licensed fire sprinkler contractor.

Approved School. A refrigeration, pipefitter, or sprinkler fitter course that has been reviewed and approved by the Department to supply requisite classroom course or shop hours to an applicant prior to being admitted for a license examination.

ASHRAE. American Society of Heating, Refrigerating and Air Conditioning Engineers.

ASME. American Society of Mechanical Engineers.

ASTM. American Society for Testing and Materials.

Boiler External Piping (BEP). The terminal points and piping external to power boilers as defined and illustrated in *ANSI/ASME B 31.1 Pressure Piping*. The installation, replacement, or repair of BEP shall be performed by a licensed pipefitter and it shall be the responsibility of the contractor to adhere to and maintain the proper ASME and National Board Code integrity while performing BEP pipefitting work.

Boiler, Heating. A steam boiler for operation at pressures not exceeding 15 psi or a hot water heating boiler or hot water supply boiler for operating at pressures not exceeding 160 psi and/or temperatures not exceeding 250°F at or near the boiler outlet.

Boiler, Power. A boiler in which steam or other vapor is generated at a pressure of more than 15 psig for use external to itself or a high-temperature water boiler intended for operation at

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pressures exceeding 160 psig and/or temperatures exceeding 250°F.

Bureau. Bureau of Pipefitters, Refrigeration Technicians and Sprinkler Fitters.

Category D Fluid Service. A Fluid Service for Process Piping in which all of the following apply:

- (a) the fluid handled is nonflammable, nontoxic, and not damaging to human tissues as defined in *ANSI/ASME B 31.3 Process Piping*;
- (b) the design gage pressure does not exceed 150 psi; and
- (c) the design temperature is from -20°F through 366°F.

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Category M Fluid Service. A Fluid Service for Process Piping in which the potential for personnel exposure is judged to be significant and in which a single exposure to a very small quantity of a toxic fluid, caused by leakage, can produce serious irreversible harm to persons on breathing or bodily contact, even when prompt restorative measures are taken.

Chief. The Chief of the Division of Inspection within the Department of Public Safety.

Commissioner. The Commissioner of the Department of Public Safety.

DAS. The Division of Apprentice Standards.

Data Report. An ASME report form that documents that all ASME Code requirements have been met.

Department. Department of Public Safety.

Division. Division of Inspection within the Department of Public Safety.

Fabrication. The joining of Piping components into integral pieces ready for assembly, which shall include bending, forming, threading, welding, or other operations upon these components, if not part of assembly. The work defined under 528 CMR 2.00 shall only apply to on-site field production.

Fire Protection Sprinkler System. A fire sprinkler system, for fire protection purposes, the work of the sprinkler fitter and apprentice shall consist of the installation of all fire protection and fire control systems, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes and hose connections to sprinkler systems, sprinkler tank heaters, back flow preventers, air lines and thermal systems, hot water fire protection systems and standpipes connected to sprinkler systems.

Fire Protection Sprinkler System Contractor's License. The license issued by the Department to a fire protection sprinkler system contractor upon its application being approved, the fee being paid, and the satisfactory completion of the requirements of 528 CMR 11.04: *Sprinkler System Licensing*. The license shall be issued in the name of the fire protection sprinkler contractors and the name of the license holder noted thereon.

Fire Protection Sprinkler Systems Contractor. A person, firm, or organization that offers to undertake the execution of contracts, the preparation of technical drawings, sale, installation, alteration, modification, inspection, maintenance, removal and repairing of any such system or any part of such system.

Fluid Service. The combination of fluid properties, operating conditions, and other factors that establish the basis for design of the piping system and requirements for a specific classification of pipefitter license to perform Pipefitting work.

High Pressure Fluid Service. A Fluid Service for which the owner specifies that the design of the Piping systems are per the rules for High Pressure Piping per *ANSI/ASME B 31.3 Process Piping, Chapter IX*.

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Installation. The handling, moving or locating of any apparatus, device, equipment or material referring to the pipefitting, refrigeration, or sprinkler fitter industry. This does not mean to refer to the final placement for hook up, but refers to any stage of the handling of said above equipment or material to where the final location may be for the piping of the equipment.

Journeyman Refrigeration Technician. Any person who has completed an apprenticeship training program satisfactory to the Bureau, and who has successfully passed a Refrigeration Technician's examination, and who, by himself or herself, or with other Journeymen Refrigeration Technicians, or with Refrigeration Apprentices does any work in Refrigeration.

2.02: continued

License Holder. An individual who has satisfactorily met the qualifications and has received a license from the Department.

Master Refrigeration Technician/Refrigeration Contractor. A person having a regular place of business, or who by himself or herself, or with other Master Refrigeration Technicians, Journeymen Refrigeration Technicians, or Refrigeration Apprentices in his or her employ performs Refrigeration work.

NFPA. National Fire Protection Association.

Non-boiler External Piping. Piping covered by *ANSI/ASME B 31.1 Pressure Piping* except for that portion defined as boiler external piping (BEP).

Normal Fluid Service. A fluid service pertaining to most process piping covered by *ANSI/ASME B 31.3* not subject to the rules for Category D, Category M, or High Pressure Fluid Service.

Pipefitting. The installation, repair, replacement, maintenance or alteration of any apparatus for piping appliances, devices or accessories for heating systems having a rating greater than seven hundred thousand British Thermal Units including apparatus and piping for the general use of conveyance of steam and associated pumping equipment, vacuum and pneumatic systems, oil and petroleum products, ice making machinery, air conditioning equipment, piping systems used for the conveyance and storage of Category M liquids, as defined in *ANSI/ASME B 31.3 Process Piping* and high pressure systems over 150 pound-force per square inch gauge or hazardous industrial type gasses used in processes, biopharma or semi-conductor manufacturing. Pipefitting shall not include sheet metal work, refrigeration systems, and boilers and plumbing as defined under 248 CMR: *Board of State Examiners of Plumbers and Gas Fitters* promulgated under M.G.L. c. 142, §§ 4 and 13.

Pipefitting Welding. Any Pipefitting work performed using any welding or brazing process and which may be done in a shop or in the field. To perform this work, a person must be certified under *ASME Boiler and Pressure Vessel, Section IX*.

Piping. Assemblies of piping components used to convey, distribute, mix, separate, discharge, meter, control, or snub fluid flows. Piping also includes pipe-supporting elements such as hangers, supports, and structural attachments.

Piping Components. Mechanical elements suitable for joining or assembly into pressure-tight fluid-containing piping systems. Components shall include but not be limited to pipe, tubing, fittings, flanges, gaskets, bolting, valves, and devices such as expansion joints, flexible joints, pressure hoses, traps, strainers, inline portions of instruments, and separators.

Power, Heating and Cooling Piping Pipefitting. Steam, condensate or hot water piping, including apparatus, appliances, devices or accessories for piping, when the rated input capacity of the primary or secondary loop of the heating system is greater than 700,000 Btu's per hour within the scope of *ANSI/ASME Pressure Piping, B 31.1 Power Piping, B 31.3 Process Piping, or B 31.9 Building Services*; or secondary coolant piping loops in air conditioning and refrigeration systems having a capacity of ten tons or greater for use in industrial, institutional,

commercial and public buildings.

Process Piping. Fluid service piping typically found in petroleum refineries; chemical, pharmaceutical, textile, paper, semiconductor, and cryogenic plants; and related processing plants and terminals. Process piping fluids include raw, intermediate, and finished chemicals; petroleum products; gas, air and water; fluidized solids; and cryogenic fluids.

Process Piping Pipefitting. Pipefitting as enumerated in M.G.L. c. 146, § 81, including Category M fluid service, High Pressure Fluid Service, Normal Fluid Service, and Category D Fluid Service.

2.02: continued

Refrigerant. The fluid used for heat transfer in a refrigerating system.

Refrigeration. The installation, repair, replacement, and/or maintenance of any refrigerant-containing part of any refrigerant system of a ten ton capacity or greater.

Refrigeration Apprentice. Any registered person who is at least 18 years of age and who is working at the business of refrigeration under the supervision of a master refrigeration technician or journeyman refrigeration technician.

Refrigeration System. A combination of interconnected parts forming a closed circuit in which refrigerant is circulated for the purpose of extracting, then rejecting heat.

Registered. A person registered according to the provisions of St. 1941, c. 707.

Secondary Coolant. Any liquid used for the transmission of heat without a change of state in air conditioning and refrigeration systems, and having no flash point or a flash point above 150°F as determined by ASTM D 93.

Sprinkler Fitter/Journeyman Sprinkler Fitter. Any person who has completed an apprenticeship training program satisfactory to the Bureau and who, by himself or herself, or with other Sprinkler Fitters, performs any work in sprinkler fitting subject to inspection under any law, ordinance, by-law, rule or regulation, but does not employ other Sprinkler Fitters.

Sprinklerfitting. The, installation, alteration, modification, inspection, testing, maintenance, removal and repairing of any Fire Protection Sprinkler System or any part of such system, excluding visual inspection where it does not impair the system.

Ton of Refrigeration. In a refrigeration system, the absorption of heat at a rate of 12,000 BTU per hour.

Verification of Course Hours Documentation. A form completed by the director of an approved refrigeration, pipefitting, or sprinkler fitter school detailing and attesting to an applicant's completion of the requisite classroom course and shop hours.

REGULATORY AUTHORITY

528 CMR 2.00: M.G.L. c. 146, § 82.

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528 CMR 3.00: STANDARDS ADOPTED

In accordance with the provisions of M.G.L. c. 146, § 82, the Bureau herewith adopts by reference the standards and codes listed as follows:

ANSI/ASHRAE

Standard 15-2010	Safety Standard for Refrigeration Systems
Standard 34-2010	Designation and Safety Classification of Refrigerants

ANSI/ASME

B31.1-2012	Power Piping
B31.3-2012	Process Piping
B31.4-2012	Pipeline Transportation Systems for Liquid and Slurries
B31.5-2013	Refrigeration Piping and Heat Transfer Components
B31.9-2011	Building Service Piping
BPE-2012	Bioprocessing Equipment
BPVC Section IX- 2013	Welding and Brazing Qualifications

ASTM

D93-2013	Standard Test Methods for Flash Point by Pensky-martens Closed Cup Tester
F2432- 2012	Standard Specification for Ice Making Machines, Icemaker-dispensers, and Ice Dispensing Equipment

NFPA

11-2010	Standard for Low-, Medium, and High-expansion Foam
13-2013	Standard for the Installation of Sprinkler Systems
13D-2013	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes
13R-2013	Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies
14-2013	Standard for the Installation of Standpipe and Hose Systems
15-2012	Standard for Water Spray Fixed Systems for Fire Protection
16-2011	Standard for the Installation of Foam-water Sprinkler and Foam-water Spray Systems
16A-1994	Recommended Practice for the Installation of Closed-head Foam-water Sprinkler Systems
20-2013	Standard for the Installation of Stationary Pumps for Fire Protection
22-2013	Standard for Water Tanks for Private Fire Protection
24-2013	Standard for the Installation of Private Fire Service Mains and Their Appurtenances
25-2011	Standard for the Inspection, Testing, and Maintenance of Water-based Fire Protection Systems
230-2003	Standard for the Fire Protection of Storage
409-2011	Standard on Aircraft Hangars
418-2011	Standard for Heliports
750-2010	Standard on Water Mist Fire Protection Systems
72-2013	National Fire Alarm and Signaling Code (Restricted to Equipment and Devices Installed on a Sprinkler System)

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REGULATORY AUTHORITY

528 CMR 3.00: M.G.L. c. 146, § 82.

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528 CMR 11.00: PREREQUISITES FOR EXAMINATIONS FOR PIPEFITTERS, REFRIGERATION TECHNICIANS, AND SPRINKLER FITTERS

Section

- 11.01: Scope of Pipefitting License Classifications
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11.01: Scope of Pipefitting License Classifications

(1) Unrestricted Pipefitter.

(a) Master Pipefitter - Unrestricted (PM-00). A person having a regular place of business or who, by himself or herself, or with other master pipefitters, journeyman pipefitters, or apprentice pipefitters in his or her employ performs any work, including Fabrication, in Power, Heating & Cooling Piping pipefitting, Process Piping pipefitting, or Pipefitting Welding.

(b) Journeyman Pipefitter - Unrestricted (PJ-00). A person who has completed an apprenticeship training program satisfactorily to the Bureau and who by himself or herself or with other journeymen pipefitters or apprentice pipefitters performs any work, including Fabrication, in Power, Heating & Cooling Piping pipefitting, Process Piping pipefitting, or Pipefitting Welding.

(c) Apprentice Pipefitter - Unrestricted (PA-00). A person who is in a registered apprenticeship program and licensed by the Department to perform any work, including Fabrication, in Power, Heating & Cooling Piping pipefitting, Process Piping pipefitting, or pipefitting Welding under the direct supervision of a duly licensed Journeyman (PJ-00) or Master (PM-00) Pipefitter.

(2) Power, Heating and Cooling Pipefitter.

(a) Master Pipefitter - Power, Heating and Cooling (PM-01). A person having a regular place of business or who, by himself or herself, or with other Master Pipefitters, Journeyman Pipefitters, or Apprentice Pipefitters in his or her employ performs any work, including Fabrication, in Power, Heating & Cooling Piping Pipefitting, or Pipefitting Welding.

(b) Journeyman Pipefitter - Power, Heating and Cooling (PJ-01). A person who has completed an apprenticeship training program satisfactorily to the Bureau and who by himself or herself or with other Journeymen Pipefitters or Apprentice Pipefitters performs any work, including Fabrication, in Power, Heating & Cooling Piping Pipefitting.

(c) Apprentice Pipefitter - Power, Heating and Cooling (PA-01). A person who is in a registered apprenticeship program and licensed by the Department to perform any work, including Fabrication, in Power, Heating & Cooling Piping Pipefitting under the direct supervision of a duly licensed Journeyman (PJ-00 or PJ-01) or Master (PM-00 or PM-01) Pipefitter.

(3) Process Piping Pipefitter.

(a) Master Pipefitter - Process (PM-02). A person having a regular place of business or who, by himself or herself, or with other Master Pipefitters, Journeyman Pipefitters, or Apprentice Pipefitters in his or her employ performs any work, including Fabrication, in

Process Piping Pipefitting, or Pipefitting Welding.

(b) Journeyman Pipefitter - Process (PJ-02). A person who has completed an apprenticeship training program satisfactorily to the Bureau and who by himself or herself or with other Journeymen Pipefitters or Apprentice Pipefitters performs any work, including Fabrication, in Process Piping Pipefitting.

(c) Apprentice Pipefitter - Process (PA-02). A person who is in a registered apprenticeship program and licensed by the Department to perform any work, including Fabrication, in Process Piping Pipefitting under the direct supervision of a duly licensed Journeyman (PJ-00 or PJ-02) or Master (PM-00 or PM-02) Pipefitter.

11.01: continued

(4) Pipefitter- Welder (PJ-W). A pipefitter licensed by the Department who performs any pipefitting welding. The (W) license restriction shall be granted to a Master or Journeyman Pipefitter applicant upon his or her passing one of the following prescribed pipefitter examinations:

- (a) PM-00. Master Pipefitter Unrestricted
- (b) PM-01-W. Master Pipefitter/Pipefitter Welder - Power, Heating, Cooling Piping
- (c) PM-02-W. Master Pipefitter/Pipefitter Welder - Process Piping
- (d) PJ-00. Journeyman Pipefitter - Unrestricted
- (e) PJ-01-W. Journeyman Pipefitter /Pipefitter Welder- Power, Heating, Cooling Piping
- (f) PJ-02-W. Journeyman Pipefitter/Pipefitter Welder - Process Piping

Applicants for the pipefitting welder license classification may be admitted for examination by meeting all of the minimum prerequisites of a journeyman pipefitter per 528 CMR 11.00.

A person who is in a registered apprenticeship program and licensed by the Department to perform any work, including Fabrication, in Power, Heating & Cooling Piping Pipefitting, Process Piping Pipefitting may perform Pipefitting Welding under the direct supervision of a duly licensed Journeyman or Master Pipefitter Welder.

11.02: Pipefitter Licensing

No person shall engage in pipefitting unless he or she is licensed pursuant to M.G.L. c. 146, § 84. Licenses shall be carried on the person at all times the licensee is engaged in pipefitting work and shall be furnished for inspection by the licensee upon request by the Commissioner, the Chief, or a District Engineering Inspector.

Every applicant shall file with the Department an application on a form provided by the Department, accompanied by the appropriate fee. All completed and approved applications for examination shall be filed with the Department 30 days before the day of examination.

(1) In order to effectuate St. 2013, c. 3, § 52, a person who is currently licensed under M.G.L. c. 146, § 84 or M.G.L. c. 142, § 3 and who has applied for a license within 180 days after September 15, 2014 shall, upon payment of the applicable fee, be issued a process piping pipefitter license.

A person who was not required to be licensed under M.G.L. c. 146, § 84 or M.G.L. c. 142, § 3 who submits satisfactory proof to the Bureau that the person has been actively engaged in process piping for a period of four years before September 15, 2014, and who has applied for a license within 180 days after September 15, 2014 shall, upon payment of the applicable fee, be issued a process piping pipefitter license. The criteria for the determination as to whether an applicant has submitted "satisfactory proof" to the Bureau shall include a letter of attestation listing at least five different examples of work experience in the process piping industry for at least a four year period as well as any other information required in an application approved by the Bureau.

A person who was not required to be licensed under M.G.L. c. 146, § 84 and who has been engaged in process piping for a period of less than four years before September 15, 2014, must pass a written examination and must follow the pipefitter licensing process outlined in 528 CMR 11.02(2) through (4).

(2) Apprentice Pipefitter License. Each applicant for a Pipefitter Apprentice License must be a high school graduate or possess a state equivalency certificate. Furthermore, each applicant must be registered with the Department of Labor Standards and DAS and be enrolled in an

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apprentice program registered with the DAS. A copy of his or her Annual Apprentice ID card issued by the DAS must be submitted to the Department of Public Safety along with the application and appropriate fee. Each applicant is limited to two renewals of his or her apprentice license, unless otherwise approved by the Bureau.

11.02: continued

(3) Journeyman Pipefitter License.

(a) Every applicant for a Journeyman Pipefitter's License must be a high school graduate or possess a state equivalency certificate. Furthermore, each applicant:

1. Shall have completed successfully 350 hours of ASME Code requirements and shall have worked for not less than 6,000 hours in Massachusetts as an apprentice before being eligible to take the examination;
2. Shall have completed successfully not less than 500 hours of study in a pipefitter's course approved by the Department of which 250 hours are practical, shop-related work; in addition, the applicant shall have completed satisfactorily 200 hours of the ASME Code requirements at a state, municipal, or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education. Furthermore, he or she shall have completed 4,000 actual working hours as an apprentice, such work time to be verified by a licensed employer; or
3. Shall have completed successfully not less than 1,000 hours of study in a pipefitter's course approved by the Department, of which 700 hours are practical, shop-related work; in addition, the applicant shall have completed satisfactorily 200 hours of ASME Code requirements at a state, municipal or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education. Furthermore, he or she shall have completed 2,000 actual work hours as an apprentice, such work time to be verified by a licensed employer.

(b) Verification of on-the-job training from an employer shall include the following information:

1. Name, address, and telephone number of the employer at which the applicant has worked;
2. The employer Master Pipefitter license number; and
3. The total number of hours of pipefitting work experience the applicant has received.

(c) No experience requirements required by this section shall be allowed for individuals while working for those entities exempted from these regulations under M.G.L. c. 146, § 87, unless such experience is part of a properly registered and qualified apprentice program.

(d) Candidates approved for examination must pass a written examination and must correctly answer 70% or more of the questions on the examination to qualify for a license.

(e) The holder of this license may not employ other journeyman or master pipefitters.

(f) A person who is licensed as a Journeyman Pipefitter with a restricted classification is eligible to be examined for another classification of Journeyman Pipefitter License. Upon successfully passing the prescribed examination, a new license shall be granted listing all of the classifications covered by his or her license.

For the purpose of computing the requirement for a student or graduate of a pipefitter course approved by the Department and cited by a recognized accrediting agency or licensed by the Massachusetts Department of Education, the Registrar of the school shall verify the transcript of the actual attendance and grades of the applicant on a Verification of Pipefitter Course Hours form.

(4) Master Pipefitter License.

(a) Applicants for a Master Pipefitter's license shall have one of the following: A Massachusetts Journeyman Pipefitter's license for not less than a total of 2,000 hours and shall have completed not less than 100 hours of additional pipefitter theory and 100 hours of additional ASME Code requirements in a day or night course approved by the Department, at a state, municipal or private school accredited by a recognized accrediting agency or

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licensed by the Massachusetts Department of Education before being eligible for examination;

(b) Candidates approved for examination must pass a written examination and must correctly answer 70% or more of the questions on the examination to qualify for a license.

(c) The holder of this license may be self-employed or have a regular place of business and employ other Master Pipefitters, Journeyman Pipefitters, or Apprentice Pipefitters.

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(d) A Master Pipefitter, who has a regular place of business by himself or herself, with other Master Pipefitters or with Journeyman or Apprentice Pipefitters in his or her employ, must prominently display his or her master pipefitter's license number on all commercial vehicles, offers, invoices, installation drawings, and on all stationery used in their business. The lettering of the license number required to be displayed on all commercial vehicles used in the master pipefitter's business shall be visible, legible and prominently displayed on vans, trucks, and doors of stake body trucks.

(e) If any applicant is denied examination by the Division for failure to meet the requirements of 528 CMR 11.00, the applicant may be admitted for examination in Pipefitting by a majority vote of the Bureau:

1. By possessing qualifications other than those specified in 528 CMR 11.00;
2. By possessing a pipefitter's license or certificate from any other state or foreign country without serving the required time as an apprentice as specified in 528 CMR 11.00.

For the purpose of computing the requirement for a student or graduate of a pipefitter course approved by the Department and cited by a recognized accrediting agency or licensed by the Massachusetts Department of Education, the Registrar of the school shall verify the transcript of the actual attendance and grades of the applicant on a Verification of Pipefitter Course Hours form.

11.03: Refrigeration Technicians/Contractor Licensing

No person shall work in Refrigeration unless he or she is licensed pursuant to M.G.L. c. 146, § 85. Licenses shall be carried on the person at all times the licensee is engaged in refrigeration work and shall be furnished for inspection by the licensee upon request by the Commissioner, the Chief, or a District Engineering Inspector.

Every applicant shall file with the Division, an application on a form provided by the Division, accompanied by the appropriate fee. All completed and approved applications for examination shall be filed with the Division 30 days before the day of examination.

(1) Refrigeration Apprentice License. Each applicant for a Refrigeration Apprentice license must be at least 18 years of age and be a high school graduate or possess a state equivalency certificate. Furthermore, he or she must be registered with the Department of Labor and Workforce Development, DAS and enrolled in an apprentice program registered with the DAS. A copy of his or her Annual Apprentice ID card issued by the DAS must be submitted to the division along with the application and appropriate fee.

Each applicant will be limited to two renewals of his or her apprentice license unless otherwise approved by the Bureau.

(2) Journeyman Refrigeration Technician's License. Every applicant for a Journeyman Refrigeration Technician's license must be a high school graduate or possess a state equivalency certificate. Furthermore, each applicant:

- (a) shall have successfully completed not less than 250 hours of study in a refrigeration technician course, approved by the Department, of which 100 hours are of 522 CMR 9.00: *Refrigeration and Air Conditioning Systems* and 150 hours of 527 CMR 12.00: *2014 Massachusetts Electrical Code (Amendments)* training before being eligible to take the examination. Furthermore, the applicant shall have obtained an EPA Section 608 Universal certification and completed 6,000 actual work hours as an apprentice, such work time to be

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verified by a licensed employer; or

(b) shall have successfully completed not less than 500 hours of study in a refrigeration technician course, approved by the Department, of which 250 hours are practical, shop-related work; 100 hours of 522 CMR 9.00: *Refrigeration and Air Conditioning Systems*; training from 522 CMR: *Board of Boiler Rules* and 100 hours of 527 CMR 12.00: *2014 Massachusetts Electrical Code (Amendments)* training before being eligible to take the examination. Furthermore, the applicant shall have obtained an EPA Section 608 Universal certification and completed 4,000 actual work hours as an apprentice, such work time to be verified by a licensed employer; or

11.03: continued

(c) shall have successfully completed not less than 1,000 hours of study in a refrigeration technician course, approved by the Department, of which 700 hours are practical, shop-related work; 100 hours of 522 CMR 9.00: *Refrigeration and Air Conditioning Systems*; training from 522 CMR: *Board of Boiler Rules* and 100 hours of 527 CMR 12.00: *2014 Massachusetts Electrical Code (Amendments)* training before being eligible to take the examination. Furthermore, the applicant shall have obtained an EPA Section 608 Universal certification and completed 2,000 actual work hours as an apprentice, such work time to be verified by a licensed employer;

(d) may be admitted for a technician examination by possessing a refrigeration technician license, master technician's license or equivalent from any other jurisdiction and by demonstrating that they meet all other work experience and certification requirements of 528 CMR 11.03.

For the purpose of computing the requirement for a student or graduate of a refrigeration technician course at a state, municipal or private school approved by the Department and accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education, the Registrar of the school shall verify the transcript of the actual attendance and the grades of the applicant on a *Verification of Refrigeration Course Hours* form.

Verification of on-the-job training from an employer shall include the following information:

1. Name, address, and telephone number of the employer at which the applicant has worked;
2. The employer's Refrigeration Contractor license number; and
3. The total number of hours of refrigeration work experience the applicant has received.

No experience requirements required by 528 CMR 11.03 shall be allowed for individuals while working for those entities exempted from 528 CMR 11.00 under M.G.L. c. 146, § 88, unless such experience is part of a properly registered apprenticeship program.

Candidates for examination must pass a written examination and must correctly answer 70% or more of the examination questions to qualify for a license.

(3) Master Refrigeration Technician's License. Applicants for a Master Refrigeration Technician's license shall have a Massachusetts Journeyman Refrigeration Technician's license for not less than 2,000 hours and shall have completed not less than 100 hours additional training in a refrigeration technician day or night course approved by the Department, at a state, municipal, or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education before being eligible for examination.

Candidates for examination must pass a written examination and must correctly answer 70% or more of the examination questions to qualify for a license.

A master Refrigeration Technician who has a regular place of business by himself or herself, with other master Refrigeration Technicians or with journeyman or apprentice Refrigeration Technicians in his or her employ, must prominently display his or her master Refrigeration Technician's license number on all commercial vehicles, offers, invoices, installation drawings, and on all stationery used in their business. The lettering of the license number required to be displayed on all commercial vehicles used in the Master Refrigeration Technician's business shall be visible, legible and prominently displayed on vans, trucks, and doors of stake body trucks.

If any applicant is denied examination for failure to meet the requirements of 528 CMR 11.03, the applicant may be admitted for examination in Refrigeration by a majority vote of the Bureau:

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- (a) By possessing qualifications other than those specified in 528 CMR 11.00;
- (b) By possessing a Refrigeration Technician's license or certificate from any other state or foreign country without serving the required time as an Apprentice as specified in 528 CMR 11.00.

For the purpose of computing the requirement for a student or graduate of a refrigeration technician course at a state, municipal or private school approved by the Department and accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education, the Registrar of the school shall verify the transcript of the actual attendance and the grades of the applicant on a *Verification of Refrigeration Course Hours* form.

11.04: Sprinkler System Licensing

(1) Sprinkler Fitter Licensing. No person shall engage in sprinkler fitting unless he or she is licensed pursuant to M.G.L. c. 146, § 85. Licenses shall be carried on the person at all times the licensee is engaged in sprinkler fitting work and shall be furnished for inspection by the licensee upon request by the Commissioner, the Chief, or a District Engineering Inspector.

Every applicant shall file with the Division, an application on a form provided by the Division, accompanied by the appropriate fee. All completed and approved applications for examination shall be filed with the Division 30 days before the day of examination.

(a) Apprentice Sprinkler Fitter License. Pursuant to M.G.L. c. 146, § 85A, applicants for a sprinkler fitter apprentice license shall, before starting his or her apprenticeship, file an application, accompanied by the appropriate fee, with the Division and shall provide documentation that the applicant is employed by a Massachusetts Sprinkler Contractor. The application shall be made on a form furnished by the division.

Each applicant will be limited to two renewals of his or her apprentice license unless otherwise approved by the Bureau.

(b) Sprinkler Fitters/Journeyman Sprinkler Fitter License. Every applicant for a sprinkler fitters/journeyman sprinkler fitters' license must be a high school graduate or possess a high school equivalency certificate. Furthermore, each applicant:

Shall have worked for not less than 8,000 hours in Massachusetts as an apprentice and have successfully completed not less than 144 hours of study for each year of the term of apprenticeship. The sprinkler training course must be approved by the Department and shall consist of practical, shop-related work; all NFPA standards related to Fire Protection and State Codes; (related instruction classes, correspondence courses, or other specially designed curriculum, any of which must be approved by this Bureau is considered acceptable in satisfying this requirement).

Candidates for examination must pass a written examination and must correctly answer 70% or more of the examination questions to qualify for a license.

For the purpose of computing the requirement for a student or graduate of an apprentice sprinkler fitter's course approved by the Department and accredited by a recognized State or Federal accrediting agency or licensed by the Massachusetts Department of Education, the Director of the school shall verify the transcript of the actual attendance and grades of the applicant on a *Verification of Sprinkler Fitter Course Hours* form.

Verification of on-the-job training from an employer shall include the following information:

1. Name, address, and telephone number of the employer at which the applicant has worked;
2. The employer's Sprinkler Contractor license number; and
3. The total number of hours of sprinkler fitter work experience the applicant has received.

If any applicant is denied examination by the Division for failure to meet the requirements of 528 CMR 11.04, the applicant may be admitted for examination as a sprinkler fitter by a majority vote of the Bureau:

- a. by possessing qualifications other than those specified in 528 CMR 11.00;
- b. by possessing a sprinkler fitter's license or certificate from any other state or foreign country without serving the required time as an apprentice as specified in 528 CMR 11.00.

(2) Fire Protection Sprinkler Contractor Licensing. No person shall engage in the preparation of technical drawings, installations, maintenance, service, inspections or testing of a fire

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protection sprinkler system or use any title, sign, card, or device indicating, or intending to indicate, or represent in any manner that he or she is or represents a licensed fire protection sprinkler system contractor without first obtaining the fire protection sprinkler system contractor's license.

Qualifications for Fire Protection Sprinkler System Contractor's License and Requirements of Fire Protection Sprinkler Systems Contractor

- (a) To become a Contractor under 528 CMR, an applicant must have satisfactorily passed an examination prescribed by the Division.

11.04: continued

(b) Every applicant shall fulfill the following prerequisites:

1. Must be at least 18 years of age;
2. Must be or have in its full time employ a valid license holder who is a person or an owner, partner, officer, or in a full time management position of a fire protection sprinkler system Contractor;
3. Must have completed not less than 300 hours of study in a sprinkler training course that is approved by the Department and consists of practical, shop-related work.
4. Must have five years of experience in the fire protection sprinkler system business in a responsible position such as managing, preparing technical drawings, or performing installation and provide written proof from his employers detailing his length of time and positions held.
5. Candidates for examination must pass a written examination and must correctly answer 70% or more of the examination questions to qualify for a license.

(c) Fire Protection Sprinkler System Contractor license holders shall prominently display their fire sprinkler system contractor license number on all commercial vehicles, offers, invoices, installation drawings, and on all stationery used in their business. The lettering of the license number required to be displayed on all commercial vehicles used in the fire protection sprinkler system contractor's business shall be visible, legible and prominently displayed on vans, trucks, and doors of stake body trucks.

(d) A license is not transferable.

(e) In no case shall a license holder be employed by more than one fire protection sprinkler system contractor at one time. If the license holder should leave the employment of the fire protection sprinkler system contractor, the contractor and the license holder must notify the Department within 30 days.

If the license holder should leave the employment of the fire protection sprinkler system contractor, the contractor shall have 60 days to submit a new application identifying another license holder. If such new application is not received within the allotted time, the Department shall revoke the license of the fire protection sprinkler system contractor. The contractor shall be permitted to complete only that work which is under contract at the time the license is revoked. No new work may be undertaken.

(f) License Applications. Each application for a license shall be filed with Bureau through the Department of Public Safety on a form furnished by the Department. The fee for the first license of a contractor and for any biennial renewal thereof; or for examination therefore shall be determined annually by the Commissioner of Administration under the provision of M.G.L. c. 7, § 3 for the filing thereof. No examination will be required for a renewal, unless the applicant fails to renew his or her license within one year after the license expiration date.

(g) Every applicant who is to obtain a fire protection sprinkler system contractor's license shall surrender his or her journeyman's sprinkler license to the Department before the contractor's license will be issued.

Upon renewal of the fire protection sprinkler systems contractor's license, if a fire protection sprinkler system contractor ceases to be an owner, partner, officer, or in a full time management position of a fire protection sprinkler system contractor, and the license was not revoked or suspended, upon application, they shall automatically be re-issued a journeyman sprinkler fitter's license, without examination.

Any person who has successfully obtained a fire protection sprinkler systems contractor license and was re-issued a journeyman sprinkler fitter's license pursuant to 528 CMR 11.04(2)(g), and while holding the journeyman sprinkler fitter's license becomes an owner, partner, officer, or works in a full time management position of a fire protection sprinkler

system contractor, and can provide sufficient proof to the Department that he or she previously held a fire protection sprinkler system contractor's license, and that license was not revoked or suspended, upon application, they shall be re-issued a fire protection sprinkler system contractor's license without re-examination.

(h) Notwithstanding the provisions of any general or special law to the contrary, no renewal license shall be issued by the Department unless licensee provides proof of liability insurance, including "completed operations" coverage in the amount of \$500,000 minimum per occurrence, which has been issued by an insurance company licensed to do business in the Commonwealth, or a bond or other type indemnity against liability providing substantially equivalent coverage. The liability insurance certificate shall list the Commonwealth of Massachusetts, Department of Public Safety as the certificate holder.

11.05: License Renewal Extension - Military Service

(1) If the licensee is on active duty with the armed forces of the United States, as defined in M.G.L. c. 4 § 7 clause forty-third, the license shall remain valid until the licensee is released from active duty and for a period of not less than 90 days following that release. For 528 CMR 11.05 to apply, the licensee must be given an Honorable Discharge, a General Discharge, or an Under Other than Honorable Conditions (UOTHC) Discharge as noted on their discharge and separation papers.

11.06: License Denials, Suspension, Revocations and Appeals

(1) Denials for Examination.

(a) Denial. The Division may refuse to examine an applicant for the following reasons:

1. Submission of an incomplete license application.
2. Failure to submit the required fees.
3. Submission of false, invalid, incorrect or fraudulent information,
4. The applicant is not eligible for renewal or licensure.
5. Applicant does not meet the requirements for licensure under 528 CMR 11.00.

(b) Appeal.

1. If the Division refuses to examine the applicant it shall notify the applicant in writing setting forth the reasons for denial.
2. Within 21 days after the denial, the applicant may appeal the Division's decision by making written demand for a hearing before a Board of three District Engineering Inspectors, appointed by the Chief of Inspections - Mechanical. A hearing shall be heard promptly in accordance with M.G.L. c. 30A and 801 CMR 1.02: *Informal/Fair Hearing Rules*. If the denial is for failure to pay a fee, the applicant is not entitled to a hearing, but may resubmit the license application with the requisite fees.
3. If, after hearing, the Board denies the applicant the opportunity to take an examination, it shall notify the applicant in writing. Such notice shall be sent no later than 30 days after the hearing is concluded, and shall contain the reasons for denial. Within 30 days after receipt of the notice, the applicant may appeal to Superior Court pursuant to M.G.L. c. 30A, § 14.

(2) Denials of Licensure.

(a) Denial. The Division may refuse to issue a license to an applicant for the following reasons:

1. Submission of an incomplete license application.
2. Failure to submit the required fees.
3. Submission of false, invalid, incorrect or fraudulent information,
4. The applicant is not eligible for renewal or licensure.
5. Failure of the examination administered by the Division.
6. If the Division finds that the applicant does not possess the integrity and general fitness to work in a safe manner and in the public interest consistent with the purposes of 528 CMR 11.00 or other sufficient cause.

(b) Appeal.

1. If the Division refuses to issue a license the applicant it shall notify the applicant in writing setting forth the reasons for denial.
2. Within 21 days after the denial, the applicant may appeal the Division's decision by making written demand for a hearing before the Bureau. A hearing shall be heard promptly in accordance with M.G.L. c. 30A and 801 CMR 1.02: *Informal/Fair Hearing*

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Rules. If the denial is for failure to pay a fee, the applicant is not entitled to a hearing, but may resubmit the license application with the requisite fees.

3. If, after hearing, the Bureau refuses to issue a license, it shall notify the applicant in writing. Such notice shall be sent within a reasonable amount of time after the hearing is concluded, and shall contain the reasons for denial. Within 30 days after receipt of the notice, the applicant may appeal to Superior Court pursuant to M.G.L. c. 30A, § 14.

11.06: continued

(3) Suspension or Revocations.

(a) A license may be suspended or revoked by a District Engineering Inspector in the Division after a hearing is conducted pursuant to M.G.L. c. 30A, or if the public interest requires prior to an adjudicatory hearing for any of the following reasons:

1. False or misleading information on the license application or license renewal.
2. Any violation of a provision of M.G.L. c. 146, §§ 81 through 89.
3. Any violation of a provision of 528 CMR.
4. Behavior that demonstrates incompetence.
5. Behavior that demonstrates untrustworthiness.
6. If the Inspector finds that the licensee did not or does not work in a safe manner and in the public interest consistent with the purposes of 528 CMR 11.00 or other sufficient cause.

(b) Procedure for suspending or revoking a license prior to a hearing in the interest of public safety.

1. Whenever a District Engineering Inspector suspends or revokes a license prior to an administrative hearing, he or she shall immediately notify the licensee in writing and provide a hearing date within ten days of said action.
2. Upon receipt of such notice, the licensee shall immediately return his or her license to the Department pending the outcome of the hearing.

(c) Procedure for suspending or revoking a license.

1. Whenever a District Engineering Inspector determines that administrative action may be taken against a licensee for any of the reasons set forth in 528 CMR 11.04(3)(a), he or she may hold a hearing relative to the license.
2. A hearing before the District Engineering Inspector shall be heard promptly in accordance with M.G.L. c. 30A and 801 CMR 1.02: *Informal/Fair Hearing Rules*.
3. The District Engineering Inspector must issue a final written decision containing the reasons for his or her decision and must be sent to the licensee via first class mail within a reasonable amount of time.

(d) Appeal.

1. To appeal the District Engineering Inspector's decision, the licensee must request an appeal hearing before a Board of three District Engineering Inspectors, appointed by Chief of Inspections - Mechanical, within ten days of the suspension or revocation of the license.
2. A hearing before the Board shall be heard promptly in accordance with M.G.L. c. 30A and 801 CMR 1.02: *Informal/Fair Hearing Rules*.
3. The Board may order any relief it deems appropriate and shall send a written decision containing the reasons for its decision to the licensee within a reasonable amount of time.
4. Within 30 days after receipt of the notice, the applicant may appeal the Board's decision to Superior Court pursuant to M.G.L. c 30A, § 14.

REGULATORY AUTHORITY

528 CMR 11.00: M.G.L. c. 146, § 82.