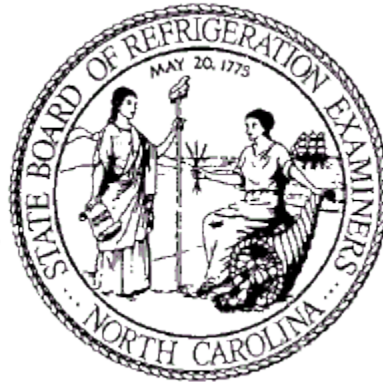


APPLICANT INFORMATION BOOKLET

STATE BOARD OF REFRIGERATION EXAMINERS

STATE OF NORTH CAROLINA



INFORMATION BOOKLET

FOR

PERSONS APPLYING TO TAKE THE QUALIFYING EXAMINATION

FOR A REFRIGERATION CONTRACTOR'S LICENSE

State Board of Refrigeration Examiners

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INTRODUCTION

This information booklet is furnished by the State Board of Refrigeration Examiners to each person applying to take the qualifying examination for a North Carolina commercial, industrial, service or transport refrigeration license.

This is an open book examination. Each applicant may use any books that he or she brings to the examination. The examination is designed to measure how well a candidate has mastered the subjects covered on the General Outline of the examination shown below.

The wording of all questions is straightforward and plain, and there is no intent to mislead. Each question has one correct answer. Therefore, the applicant should read each question and its answer choices thoroughly and carefully. Then select the one answer that appears to be most nearly correct.

In order to pass the qualifying examination, an applicant is required to pass all parts of the examination within the same one-year period and within no more than three consecutive attempts. Each time an applicant takes the examination, he shall take all parts for which he does not have currently valid passing grades. If the applicant fails to pass all parts within one year or within three consecutive attempts (whichever period is shorter), any passing grades for individual parts shall no longer be valid and the applicant must start over by re-taking all parts of the examination.

Applicants are urged to carefully study all of the information contained in this booklet as part of their preparation to take a qualifying examination.

SPECIAL ACCOMMODATIONS FOR CANDIDATES WITH DISABILITIES

The State Board of Refrigeration Examiners wants to ensure that all qualified individuals with a disability have the opportunity to take either of the licensing examinations. Wheelchair access is available at the test center.

Qualified candidates with sensory, mental or physical disabilities that would prevent them from taking the examinations under standard conditions should contact the Board Office two weeks prior to their scheduled examination.

OUTLINE

I. Commercial Refrigeration Contractor

Questions are multiple-choice or true-false. Six and one-half hours are allotted for this examination and it is administered in two sections. You will be given four hours to complete the first section (Parts A, B and C) and two and one-half hours to complete Part D.

PART A:

Law, Administrative Code and Safety
Fifteen (15) questions.

PART B:

Equipment, Equipment Performance, Theory and Electrical
Forty (40) questions.

PART C:

Electrical and Mechanical Code
Twenty (20) questions.

PART D:

Plans, Specifications and Estimating
Twenty-five (25) multiple choice questions. On this part, each applicant is given plans and specifications for a refrigeration installation. The applicant is required to make the take-off of parts and equipment just as if he or she were planning to bid on this job.

II. INDUSTRIAL REFRIGERATION CONTRACTOR

Questions are multiple-choice or true-false. Six and one-half hours are allotted for this examination and it is administered in two sections. You will be given four hours to complete the first section (Parts A, B and C) and two and one-half hours to complete Part D.

PART A:

Law, Administrative Code and Safety
Thirty (30) questions

PART B

Equipment, Theory and Electrical
Twenty-five (25) questions

PART C:

Electrical and Mechanical Code
Twenty (20) questions.

PART D:

Plans, Specifications and Estimating

Twenty-five (25) multiple choice questions. On this part, each applicant is given plans and specifications for an industrial refrigeration installation.

The applicant is required to make the take-off of parts and equipment just as if he or she were planning to bid on this job.

III. SERVICE REFRIGERATION CONTRACTOR

Questions are multiple-choice or true-false. This is a four hour examination.

PART A:

Law, Administrative Code and Safety

Fifteen (15) questions.

PART B:

Equipment, Equipment Performance, Theory and Electrical

Forty (40) questions.

PART C:

Electrical and Mechanical Code

Twenty (20) questions.

IV. TRANSPORT REFRIGERATION CONTRACTOR

Questions are multiple-choice or true-false. This is a four hour examination.

PART A:

Law, Administrative Code and Safety

Fifteen (15) questions)

PART B:

**Equipment, Equipment Performance and Theory
(includes diagnostic and maintenance)**

Thirty-five (35) questions

PART C:

Transport Specific Applications

Twenty-five (25) questions

REFERENCES

MODERN REFRIGERATION AND AIR CONDITIONING,

Althouse, Turnquist & Bracciano
Goodheart-Wilcox Co., Inc.
18604 West Creek Dr.
Tinley Park, Illinois 60477-6243
(800) 323-0440
www.g-w.com

UNDERSTANDING INDUSTRIAL REFRIGERATION FROM THE INSIDE OUT

Industrial ammonia Refrigeration Training Manual – Third Edition (Industrial Exam only)

Garden City Ammonia Program
2404 East Fulton Plaza
Garden City, KS 67846-6159
(620) 271-0037

GENERAL STATUTE 87, ARTICLE 5 (See Page 4)

(Refrigeration Licensing Law)
State Board of Refrigeration Examiners
1027 US 70 Highway W, Suite 221
Garner, NC 27529
(919) 779-4711

NC ADMINISTRATIVE CODE, CHAPTER 60 (See Page 10)

State Board of Refrigeration Examiners
1027 US 70 Highway W, Suite 221
Garner, NC 27529
(919) 779-4711

NATIONAL ELECTRICAL CODE (NEC) (Commercial Refrigeration Exam Only)

N. C. Department of Insurance
Engineering & Building Codes Division
322 Chapanoke Rd., Suite 200
Raleigh, NC 27603
(919) 661-5880

NORTH CAROLINA STATE BUILDING CODE, MECHANICAL CODE (Commercial Refrigeration Only)

N. C. Department of Insurance
Engineering & Building Codes Division
322 Chapanoke Rd., Suite 200
Raleigh, NC 27603
(919) 661-5880

TRANSPORT REFRIGERATION STUDY GUIDE FOR TECHNICIANS PREPARING FOR TRANSPORT REFRIGERATION EXAMINATION (Transport Exam Only)

State Board of Refrigeration Examiners
1027 US 70 Highway W, Suite 221
Garner, NC 27529
(919) 779-4711

CHAPTER 87 - ARTICLE 5

Laws applicable to refrigeration contracting in the State of North Carolina

REFRIGERATION CONTRACTORS

§ 87-52. State Board of Refrigeration Examiners; appointment; term of office.

For the purpose of carrying out the provisions of this Article, the State Board of Refrigeration Examiners is created, consisting of seven members appointed by the Governor to serve seven-year staggered terms. The Board shall consist of one member who is a wholesaler or a manufacturer of refrigeration equipment; one member from an engineering school of The University of North Carolina, one member from the Division of Public Health of The University of North Carolina, two licensed refrigeration contractors, one member who has no ties with the construction industry to represent the interest of the public at large, and one member with an engineering background in refrigeration. The term of office of one member shall expire each year. Vacancies occurring during a term shall be filled by appointment of the Governor for the unexpired term. Whenever the term "Board" is used in this Article, it means the State Board of Refrigeration Examiners. No Board member shall serve more than one complete consecutive term. (1955, c. 912, s. 1; 1959, c. 1206, s. 2; 1973, c. 476, s. 128; 1979, c. 712, s. 1; 1995, c. 376, s. 1.)

§ 87-53. Removal, qualifications and compensation of members; allowance for expenses.

The Governor may remove any member of the Board for misconduct, incompetency or neglect of duty. Each member of the Board shall be a resident of this State at the time of his appointment. Payment of compensation and reimbursement of expenses of Board members shall be governed by G.S. 93B-5. (1955, c. 912, s. 2; 1969, c. 445, s. 9; 1979, c. 712, ss. 2, 7.)

§ 87-54. Organization meeting; officers; seal; rules.

The Board shall within 30 days after its appointment meet in the City of Raleigh and organize, and shall elect a chairman and secretary and treasurer, each to serve for one year. Thereafter said officer shall be elected annually. The secretary and treasurer shall give bond approved by the Board for the faithful performance of his duties, in such sum as the Board may, from time to time, determine. The Board shall have a common seal, shall formulate rules to govern its actions, and is hereby authorized to employ such personnel as it may deem necessary to carry out the provisions of this Article. (1955, c. 912, s. 3.)

§ 87-55. Regular and special meetings; quorum.

The Board after holding its first meeting, as hereinbefore provided, shall thereafter hold at least two regular meetings each year. Special meetings may be held at such times and places as the bylaws and/or rules of the Board provide; or as may be required in carrying out the provisions hereof. A quorum of the Board shall consist of four members. (1955, c. 912, s. 4.)

§ 87-56. Record of proceedings and register of applicants; reports.

The Board shall keep a record of its proceedings and a register of all applicants for examination, showing the date of each application, the name, age and other qualifications, places of business and residence of each applicant. The books and records of the Board shall be prima facie evidence of the correctness of the contents thereof. On or before the first day of March of each year the Board shall submit to the Governor a report of its activities for the preceding year, and file with the Secretary of State a copy of such report, together with a statement of receipts and expenditures of the Board attested by the chairman and secretary. (1955, c. 912, s. 5.)

§ 87-57. License required of persons, firms or corporations engaged in the refrigeration trade.

In order to protect the public health, safety, morals, order and general welfare of the people of this State, all persons, firms or corporations, whether resident or nonresident of the State of North Carolina, before engaging in refrigeration business or contracting, as defined in this Article, shall first apply to the Board and shall procure a license. (1955, c. 912, s. 6.)

§ 87-58. Definitions; contractors licensed by Board; examinations.

(a) As applied in this Article, "refrigeration trade or business" is defined to include all persons, firms or corporations engaged in the installation, maintenance, servicing and repairing of refrigerating machinery, equipment, devices and components relating thereto and within limits as set forth in the codes, laws and regulations governing refrigeration installation, maintenance, service and repairs within the State of North Carolina or any of its political subdivisions. The provisions of this Article shall not repeal any wording, phrase, or paragraph as set forth in Article 2 of Chapter 87 of the General Statutes. This Article shall not apply to any of the following:

(1) The installation of self-contained commercial refrigeration units equipped with an Original Equipment Manufacturer (OEM) molded plug that does not require the opening of service valves or replacement of lamps, fuses, and door gaskets.

(2) The installation and servicing of domestic household self-contained refrigeration appliances equipped with an OEM molded plug connected to suitable receptacles which have been permanently installed and do not require the opening of service valves.

(3) Employees of persons, firms, or corporations or persons, firms or corporations, not engaged in refrigeration contracting as herein defined, that install, maintain and service their own refrigerating machinery, equipment and devices.

(4) Any person, firm or corporation engaged in the business of selling, repairing and installing any comfort cooling devices or systems.

(b) The term "refrigeration contractor" means a person, firm or corporation engaged in the business of refrigeration contracting.

(b1) The term "transport refrigeration contractor" means a person, firm, or corporation engaged in the business of installation, maintenance, servicing, and repairing of transport refrigeration.

(c) Any person, firm or corporation who for valuable consideration engages in the refrigeration business or trade as herein defined shall be deemed and held to be in the business of refrigeration contracting.

(d) In order to protect the public health, comfort and safety, the Board shall prescribe the standard of experience to be required of an applicant for license and shall give an examination designed to ascertain the technical and practical knowledge of the applicant concerning the analysis of plans and specifications, estimating cost, fundamentals of installation and design as they pertain to refrigeration; and as a result of the examination, the Board shall issue a certificate of license in refrigeration to applicants who pass the required examination and a license shall be obtained in accordance with the provisions of this Article, before any person, firm or corporation shall engage in, or offer to engage in the business of refrigeration contracting. The Board shall prescribe standards for and issue licenses for refrigeration contracting and for transport refrigeration contracting. A transport refrigeration contractor license is a specialty license that authorizes the licensee to engage only in transport refrigeration contracting. A refrigeration contractor licensee is authorized to engage in transport refrigeration and all other aspects of refrigeration contracting.

Each application for examination shall be accompanied by a check, post-office money order or cash in the amount of the annual license fee required by this Article. Regular examinations shall be given in the Board's office by appointment.

(e) Repealed by Session Laws 1979, c. 843, s. 1.

(f) Licenses Granted without an Examination. - Persons who had an established place of business prior to July 1, 1979, and who produce satisfactory evidence that they are engaged in the refrigeration business as herein defined in any city, town or other area in which Article 5 of Chapter 87 of the General Statutes did not previously apply shall be granted a certificate of license, without examination, upon application to the Board and payment of the license fee, provided completed applications shall be made prior to June 30, 1981.

(g) The current license issued in accordance with the provisions of this Article shall be posted in the business location of the licensee, and its number shall appear on all proposals or contracts and requests for permits issued by municipalities.

(h) A transport refrigeration contractor having an established place of business doing transport refrigeration contracting prior to October 1, 1995, shall be granted a transport refrigeration contracting specialty license, without examination, if the person produces satisfactory evidence the person is engaged in transport refrigeration contracting, pays the required license fee, and applies to the Board prior to January 1, 1997. The current specialty license shall be posted in accordance with subsection (g) of this section.

(i) Nothing in this Article shall relieve the holder of a license issued under this section from complying with the building or electrical codes, statutes, or ordinances of the State or of any county or municipality or from responsibility or liability for negligent acts in connection with refrigeration contracting work. The Board shall not be liable in damages, or otherwise, for the negligent acts of licensees.

(j) The Board in its discretion upon application may grant a reciprocal license to a person holding a valid, active substantially comparable license from another jurisdiction, but only to the extent the other jurisdiction grants reciprocal privileges to North Carolina licensees. (1955, c. 912, s. 7; 1959, c. 1206, s. 1; 1979, c. 843, ss. 1, 2; 1987 (Reg. Sess., 1988), c. 1082, s. 5; 1989, c. 770, s. 13; 1995, c. 376, s. 2; 1998-216, ss. 1, 2, 2.1; 2009-333, ss. 1, 2.)

§ 87-59. Revocation or suspension of license for cause.

(a) The Board shall have power to revoke or suspend the license of any refrigeration contractor who is guilty of any fraud or deceit in obtaining a license, or who fails to comply with any provision or requirement of this Article, or for gross negligence, incompetency, or misconduct, in the practice of or in carrying on the business of a refrigeration contractor as defined in this Article. Any person may prefer charges of fraud, deceit, gross negligence, incompetency, misconduct, or failure to comply with any provision or requirement of this Article, against any refrigeration contractor who is licensed under the provisions of this Article. All charges shall be in writing and verified by the complainant, and shall be heard and determined by the Board in accordance with the provisions of Chapter 150B of the General Statutes.

(b) The Board shall adopt and publish rules and regulations, consistent with the provisions of this Article and Chapter 150B of the General Statutes, governing the suspension and revocation of licenses.

(c) The Board shall establish and maintain a system whereby detailed records are kept regarding complaints against each licensee. This record shall include, for each licensee, the date and nature of each complaint, investigatory action taken by the Board, any findings of the Board, and the disposition of the matter.

(d) In a case in which the Board is entitled to convene a hearing to consider a charge under this section, the Board may accept an offer to compromise the charge, whereby the accused shall pay to the Board a penalty not to exceed one thousand dollars (\$1,000). The funds derived from the penalty shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2.

(e) All records, papers, and other documents containing information collected and compiled by the Board, or its members or employees, as a result of investigations, inquiries, or interviews conducted in connection with a licensing or disciplinary matter, shall not be considered public records within the meaning of Chapter 132 of the General Statutes. (1955, c. 912, s. 8; 1973, c. 1331, s. 3; 1979, c. 712, s. 3; 1989, c. 770, s. 14; 1995, c. 376, s. 3; 2009-333, ss. 3, 4.)

§ 87-60. Reissuance of revoked licenses; replacing lost or destroyed licenses.

The Board may in its discretion reissue license to any person, firm or corporation whose license was revoked if a majority of the Board votes in favor of such reissuance for reasons deemed sufficient by the Board. A new certificate of registration to replace any license which may be lost or destroyed may be issued subject to the rules and regulations of the Board. (1955, c. 912, s. 9; 1998-216, s. 3.)

§ 87-61. Violations made misdemeanor; employees of licensees excepted.

Any person, firm or corporation who shall engage in or offer to engage in, or carry on the business of refrigeration contracting as defined in this Article, without first having been licensed to engage in the business, or businesses, as required by the provisions of this Article; or any person, firm or corporation holding a refrigeration license under the provisions of this Article who shall practice or offer to practice or carry on any type of refrigeration contracting not authorized by the license; or any person, firm or corporation who shall give false or forged evidence of any kind to the Board, or any member thereof, in obtaining a license, or who shall falsely impersonate any other practitioner of like or different name, or who shall use an expired or revoked license, or who shall violate any of the provisions of this Article, shall be guilty of a Class 3 misdemeanor. The Board may, in its discretion, use its funds to defray the costs and expenses, legal or otherwise, in the prosecution of any violation of this Article. Employees, while working under the supervision and jurisdiction of a person, firm or corporation licensed in accordance with the provisions of this Article, shall not be construed to have engaged in the business of refrigeration contracting. (1955, c. 912, s. 10; 1993, c. 539, s. 607; 1994, Ex. Sess., c. 24, s. 14(c); 1995, c. 376, s. 4; 2009-333, s. 5.)

§ 87-61.1. Board may seek injunctive relief; retain counsel.

(a) Whenever it appears to the Board that any person, firm or corporation is violating any of the provisions of this Article or of the rules and regulations promulgated under this Article, the Board may apply to the superior court for a restraining order and injunction to restrain the violation; and the superior courts have jurisdiction to grant the requested relief, irrespective of whether or not criminal prosecution has been instituted or administrative sanctions imposed by reason of the violation.

(b) The Board may employ or retain legal counsel for matters and purposes the Board deems fit and proper, subject to G.S. 114-2.3. (1979, c. 712, s. 4; 2009-333, s. 6.)

§ 87-62. Only one person in partnership or corporation need have license.

(a) A corporation or partnership may engage in the business of refrigeration contracting if one or more persons connected with the corporation or partnership is registered and licensed as herein required, and the licensed person executes all contracts, exercises general supervision over the work done thereunder and is responsible for compliance with all the provisions of this Article. The Board may determine the number of businesses and the proximity of the businesses one to another over which the licensed person may be responsible.

(b) For purposes of this section, the licensee's connection to the corporation or partnership shall be in the form of a written contract that is executed prior to the corporation or partnership engaging in refrigeration contracting.

(c) Nothing in this Article shall prohibit any employee from becoming licensed pursuant to the provisions thereof. (1955, c. 912, s. 11; 1998-216, s. 4.)

§ 87-63. License fees payable in advance; application of.

All license fees shall be paid in advance as hereafter provided to the secretary and treasurer of the Board and by him held as a fund for the use of the Board. The compensation and expenses of the members of the Board as herein provided, the salaries of its employees, and all expenses incurred in the discharge of its duties under this Article shall be paid out of such fund, upon the warrant of the chairman and secretary and treasurer: Provided, upon the payment of the necessary expenses of the Board as herein set out, and the retention by it of twenty-five per centum (25%) of the balance of funds collected hereunder the residue, if any, shall be paid to the State Treasurer. (1955, c. 912, s. 12.)

§ 87-63.1. Ownership of real property; equipment; liability insurance.

(a) The Board shall have the power to acquire, hold, rent, encumber, alienate, and otherwise deal with real property in the same manner as a private person or corporation, subject only to the approval of the Governor and the Council of State. Collateral pledged by the Board for an encumbrance is limited to the assets, income, and revenues of the Board.

(b) The Board may purchase or rent equipment and supplies and purchase liability insurance or other insurance to cover the activities of the Board, its operations, or its employees. (2009-333, s. 7.)

§ 87-64. Examination and license fees; annual renewal.

Each applicant for a license by examination shall pay to the Board of Refrigeration Examiners a nonrefundable examination fee in an amount not to exceed the sum of forty dollars (\$40.00). In the event the applicant successfully passes the examination, the examination fee shall be applied to the license fee required of licensees for the current year in which the examination was taken and passed.

The license of every person licensed under the provisions of this statute shall be annually renewed. Effective January 1, 2012, the Board may require, as a prerequisite to the annual renewal of a license, that licensees complete continuing education courses in subjects related to refrigeration contracting to ensure the safe and proper installation of commercial and transport refrigeration work and equipment. On or before November 1 of each year the Board shall cause to be mailed an application for renewal of license to every person who has received from the Board a license to engage in the refrigeration business, as heretofore defined. On or before January 1 of each year every licensed person who desires to continue in the refrigeration business shall forward to the Board a renewal fee in an amount not to exceed forty dollars (\$40.00) together with the application for renewal. Upon receipt of the application and renewal fee the Board shall issue a renewal certificate for the current year. Failure to renew the license annually shall automatically result in a forfeiture of the right to engage in the refrigeration business. Any licensee who allows the license to lapse may be reinstated by the Board upon payment of a fee not to exceed seventy-five dollars (\$75.00). Any person who fails to renew a license for two consecutive years shall be required to take and pass the examination prescribed by the Board for new applicants before being licensed to engage further in the refrigeration business. (1955, c. 912, s. 13; 1969, c. 314; 1979, c. 843, ss. 3, 4; 1998-216, s. 5; 2009-333, s. 8.)

§ 87-64.1. Public awareness program.

The Board shall establish and implement a public awareness program to inform the general public of the purpose and function of the Board. (1979, c. 712, s. 4.)

NORTH CAROLINA ADMINISTRATIVE CODE

CHAPTER 60 - BOARD OF REFRIGERATION EXAMINERS

SECTION .0100 ORGANIZATION AND DEFINITIONS

21 NCAC 60 .0101 STRUCTURE OF BOARD

*History Note: Authority G.S. 8752; 8754;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. April 1, 1989; December 1, 1987;
Repealed Eff. December 1, 1993.*

21 NCAC 60 .0102 OFFICE OF BOARD

- (a) The Board's office and mailing address is located at 889 US 70 Highway West, Garner, North Carolina 27529.
- (b) The Board's website is <http://www.refrigerationboard.org>.

*History Note: Authority G.S. 8754;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. June 1, 2015; April 1, 2015; September 1, 2011; August 1, 2004; July 1, 2000; August 1, 1995;
December 1, 1993; October 1, 1994.*

21 NCAC 60 .0103 RULEMAKING AND ADMINISTRATIVE HEARING PROCEDURES

- (a) Administrative hearing procedures as set forth in Article 3A of Chapter 150B of the General Statutes of North Carolina shall be followed.
- (b) Rulemaking procedures as set forth in Article 2 of Chapter 150B of the General Statutes of North Carolina shall be followed.
- (c) With respect to rules governing the conduct of hearings:
- (1) "presiding officer" means the Chairman of the State Board of Refrigeration Examiners or, the Chairman being unable to preside, a member of the Board designated by the full Board provided, however, that person shall not be the member serving on the review committee; and
- (2) the following rules establishing procedures for contested cases, adopted by the Office of Administrative Hearings and contained in Title 26, Chapter 3 of the North Carolina Administrative Code, are hereby incorporated by reference for contested cases for which the Board has authority to adopt rules under G.S. 150B38(h): .0001(1), .0005, .0006, .0012, .0013, .0014, .0015, .0016, .0017, .0018, .0019, .0020, .0021 and .0024. This incorporation does not include subsequent amendments and editions and applies to the listed rules in 26 NCAC 3 as amended as of January 1, 1989. References in such rules to the Office of Administrative Hearings shall be deemed for this purpose to be references to the State Board of Refrigeration Examiners, and the presiding officer for Board hearings shall have the powers and duties given in such rules to the administrative law judge. Copies of the rules incorporated by reference are on file in the Board's office and may be obtained there at no cost.

*History Note: Authority G.S. 8754; 150B21.6; 150B38(h);
Eff. February 1, 1981;
Amended Eff. October 1, 1995; April 1, 1989; May 1, 1988; October 1, 1984.*

21 NCAC 60 .0104 RESERVED FOR FUTURE CODIFICATION 21 NCAC 60 .0105 REFRIGERATION LAW PLUGIN DEVICES

*History Note: Authority G.S. 8754; 8758;
Recodified from 21 NCAC 60 .0303 Eff. January 13, 1989;
Repealed Eff. November 1, 1995.*

SECTION .0200 EXAMINATIONS

21 NCAC 60 .0201 DATES OF BOARD MEETINGS

*History Note: Authority G.S. 8754; 8758;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. April 1, 1989; October 1, 1984; February 1, 1981;
Repealed Eff. August 1, 2004.*

21 NCAC 60 .0202 APPLICATION FOR EXAMINATION 21 NCAC 60 .0203 FORM

*History Note: Authority G.S. 8754; 8764; 150A11(1);
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. February 1, 1981;
Repealed Eff. October 1, 1984.*

21 NCAC 60 .0204 SCORING EXAMINATIONS

*History Note: Authority G.S. 8754; 8758;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. April 1, 1997; August 1, 1995; October 1, 1984;
Repealed Eff. August 1, 2004.*

21 NCAC 60 .0205 RENEWAL AND REINSTATEMENT FEES

*History Note: Authority G.S. 8754; 8764;
Eff. October 1, 1984;
Repealed Eff. May 1, 1988.*

21 NCAC 60 .0206 EXAMINATION APPLICATION DULY FILED

An examination application shall be considered as duly filed when the applicant has filed an application with the Board, together with information verifying that he meets all of the minimum requirements to sit for an examination. By filing his application with the Board, an applicant authorizes the Board or the Board's staff to verify, in any manner the Board or staff deems necessary and appropriate, the information submitted on or in support of his application.

*History Note: Authority G.S. 8754; 8758;
Eff. October 1, 1984;
Amended Eff. August 1, 2004.*

21 NCAC 60 .0207 REQUIREMENTS FOR EXAMINATION APPLICANTS

(a) An applicant for the commercial refrigeration examination shall be eligible to take that examination upon:

- (1) Filing with the Board an application, on a form provided by the Board, together with the non-refundable combined examination license fee.
 - (2) Furnishing with his application information verifying that he has acquired at least 4000 hours of commercial refrigeration experience gained while engaged actively and directly in the installation, maintenance, servicing or repairing of commercial, industrial or institutional refrigeration equipment.
- (b) An applicant for the transport refrigeration examination shall be eligible to take that examination upon:
- (1) Filing with the Board an application, on a form provided by the Board, together with the non-refundable combined examination license fee.
 - (2) Furnishing with his application information verifying that he has acquired at least 4000 hours of transport or commercial refrigeration experience or a combination of both gained while engaged actively and directly in the installation, maintenance, servicing or repairing of transport or commercial refrigeration equipment or a combination of both.
- (c) Prior to filing the application, qualifying experience shall be acquired while working under the supervision of a person who holds a valid refrigeration contractor's license, who is a registered professional engineer or who has equivalent industry experience. Up to one-half of the experience may be in academic or technical training directly related to the field of endeavor for which the examination is requested. Applicants who obtain a license shall receive a certificate issued by the Board, bearing that license number. The license shall not be assigned or transferred to another individual.
- (d) An individual holding a valid transport contractor refrigeration license shall be eligible to sit for the commercial refrigeration examination upon filing with the Board an application, on a form provided by the Board, together with the combined examination-license fee.
- (e) The Board shall deny an examination applicant permission to take an examination when it finds the applicant is not eligible, regardless of whether it has previously notified the applicant that he may take the examination. The Board shall refuse to issue a license to a licensee when it finds the applicant is not qualified, regardless of whether the applicant has passed the appropriate examination. An applicant may contest the Board's decision by requesting an administrative hearing.

History Note: Authority G.S. 8754; 8758;

Eff. October 1, 1984;

Amended Eff. August 1, 2004, July 1, 2000; April 1, 1997; December 1, 1993; April 1, 1989; September 1, 1988.

21 NCAC 60 .0208 EXAMINATION REVIEW

An applicant who fails an examination or any portion of the examination shall have the opportunity to review any incorrect answers immediately following the examination.

History Note: Authority G.S. 8754; 8758(d); 93B8(c);

Eff. May 1, 1988;

Amended Eff. August 1, 2004.

21 NCAC 60 .0209 FEES

Fees shall be set at the statutory maximum for the following:

- (1) Examination application/initial licensure;
- (2) License renewal;
- (3) License reinstatement.

History Note: Authority G.S. 8758(d); 8764;

Eff. May 1, 1989.

21 NCAC 60 .0210 SPECIAL EXAMINATION

History Note: Authority G.S. 8754; 8758(d); 93B-8(c);

Eff. December 1, 1993;
Repealed Eff. August 1, 2004.

21 NCAC 60 .0211 CERT REQUIREMENTS OF EPA: ISSUANCE OF CERT LICENSES BY BOARD

- (a) All licensed refrigeration contractors and technicians as defined in 40 CFR 82.161 who handle refrigerants as stated in the Act and regulations must be certified by an EPA-Approved Technician's Certification Program effective November 14, 1994.
- (b) The State Board of Refrigeration Examiners shall issue a license or certification to contractors and technicians who can document successful completion of an EPA-Approved Course and Examination.

History Note: Authority G.S. 87-52; 87-54; 87-58; 42 U.S.C. ' 7671g(a); 40 C.F.R. 82.161;
Eff. February 1, 1994.

21 NCAC 60 .0212 QUALIFYING EXAMINATIONS

- (a) Commercial Refrigeration contractor examinations are divided into four parts, "A," "B," "C" and "D." Transport refrigeration contractor examinations are divided into three parts, "A", "B" and "C".
- (b) Each applicant must successfully complete 70 percent of each part to pass an examination. Each candidate who passes an examination shall be issued a refrigeration contractor's license.
- (c) All qualifying examinations administered by the Board for each license classification shall be written or computer-based examinations and must be taken by the approved applicant.
- (d) The executive director shall schedule the examination and shall notify the approved applicant of the date, time and place.
- (e) The executive director shall arrange for examinations to be administered by the Board.

History Note: Authority G.S. 8754; 8758;
Eff. August 1, 2004.

21 NCAC 60 .0213 EXAMINATIONS

- (a) In order to pass the qualifying examination, an applicant is required to pass all parts of the examination within the same one year period and within no more than three consecutive attempts. Each time an applicant takes the examination, he shall take all parts for which he does not have currently valid passing grades. If the applicant fails to pass all parts within one year or within three consecutive attempts (whichever period is shorter), any passing grades for individual parts shall no longer be valid and the applicant must start over by re-taking all parts of the examination.
- (b) A person who fails an examination must wait a period of five business days from the date he last failed an examination before he will be eligible to take another examination.
- (c) Each person who fails an examination shall be notified of his scores and the parts of the examination he failed.
- (d) If a person files an application for examination which is accepted, and takes and fails the examination, his verification of refrigeration experience shall be kept and shall be sufficient for taking any future examination, provided he files another application accompanied by the required fee.

History Note: Authority G.S. 8754; 8758;
Eff. August 1, 2004

21 NCAC 60 .0214 LICENSURE FOR MILITARY-TRAINED APPLICANT; LICENSURE FOR MILITARY SPOUSE

- (a) Licensure for a military-trained applicant. Upon receipt of a request for licensure pursuant to G.S. 93B-15.1 from a military-trained applicant, the Board shall issue a license to the applicant who satisfies the following conditions:

- (1) submits an Application for License to Practice Refrigeration Contracting, as set forth in Rule .0206 of this Section. The application is available on the website at <http://www.refrigerationboard.org/applytotakeexam/application>;
 - (2) submits a license fee in accordance with G.S. 87-64 and Rule .0209 of this Section;
 - (3) provides documentation to satisfy conditions set out in G.S. 93B-15.1(a)(1) and (2), as set forth on <http://refrigerationboard.org/applytotakeexam/military.html>; and
 - (4) provides documentation that the applicant has not committed any act in any jurisdiction that would constitute grounds for refusal, suspension, or revocation of a license in North Carolina at the time the act was committed.
- (b) Licensure for a military spouse. Upon receipt of a request for licensure pursuant to G.S. 93B-15.1 from a military spouse, the Board shall issue a license to the applicant who satisfies the following conditions:
- (1) submits an Application for License to Practice Refrigeration Contracting, as set forth in Rule .0206 of this Section. The application is available on the website at <http://www.refrigerationboard.org/applytotakeexam/application>;
 - (2) submits a license fee in accordance with G.S. 87-64 and Rule .0209 of this Section;
 - (3) submits written documentation demonstrating that the applicant is married to an active member of the U.S. military;
 - (4) provides documentation to satisfy conditions set out in G.S. 93B-15.1(b)(1) and (2), as set forth on <http://refrigerationboard.org/applytotakeexam/military.html>;
 - (5) provides documentation that the applicant has not committed any act in any jurisdiction that would constitute grounds for refusal, suspension, or revocation of a license in North Carolina at the time the act was committed; and
 - (6) is in good standing and has not been disciplined by the agency that had jurisdiction to issue the license, certification, or permit.

*History Note: Authority G.S. 93B-15.1;
Eff. February 1, 2015.*

SECTION .0300 LICENSES AND FEES

21 NCAC 60 .0301	REGISTER OF LICENSEES
21 NCAC 60 .0302	DESCRIPTION OF FORMS

*History Note: Authority G.S. 8754; 150B11(1);
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. October 1, 1984; February 1, 1981;
Repealed Eff. May 1, 1988.*

21 NCAC 60 .0303	REFRIGERATION LAW PLUGIN DEVICES
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*History Note: Authority G.S. 8754; 8758;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. May 1, 1988; October 1, 1984;
Recodified to Rule .0105 Eff. January 13, 1989.*

21 NCAC 60 .0304 RENEWALS AND REINSTATEMENTS

Refrigeration license/reinstatement notices are sent out to all licensees on or about October 31 of each year. On or about January 15, each person who has not applied for the renewal of his license is notified that his license has lapsed and is sent a letter instructing him to apply for the reinstatement of his license. On or about February 1, those lapsed licensees who have not replied to the above letter are sent another letter by certified mail notifying them that their license has lapsed and that it is unlawful to engage further in the business of refrigeration contracting.

*History Note: Authority G.S. 8754; 8764;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. April 1, 1989.*

21 NCAC 60 .0305 FORM: RENEWAL APPLICATION

*History Note: Authority G.S. 8754; 150B11;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. May 1, 1988.*

**21 NCAC 60 .0306 FORM: REINSTATEMENT APPLICATION
21 NCAC 60 .0307 PROBLEMS AND COMPLIANCE
21 NCAC 60 .0308 REINSTATEMENT AFTER SUSPENSION**

*History Note: Authority G.S. 8754; 8759; 8764;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.*

21 NCAC 60 .0309 FORM: REINSTATEMENT APPLICATION

*History Note: Authority G.S. 8754; 8764; 150B11(1);
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Amended Eff. February 1, 1981;
Repealed Eff. May 1, 1988.*

21 NCAC 60 .0310 LOST OR DESTROYED CERTIFICATES

A lost or destroyed refrigeration license certificate may be reissued at no cost for a current year, upon receipt of a written request from the licensee stating the reason for his requesting a new certificate.

*History Note: Authority G.S. 8754; 8760;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978.*

21 NCAC 60 .0311 PERMITS

- (a) The refrigeration license number of the licensee shall appear on all applications for permits.
- (b) A licensee shall assure that a permit is obtained from the local Building Code enforcement official before commencing any installation work for which a license is required by the Board. The licensee shall also assure that a request for final inspection is made within 10 days of subsequent completion of the work for which a license is required, absent agreement with the owner and the local Building Code enforcement official.
- (c) A licensee shall obtain permits and allow his number to appear on permits only for work over which he will provide general supervision until the completion of the work, for which he holds the contract and for which he receives all contractual payments.
 - (1) General supervision is that degree of supervision which is necessary and sufficient to ensure that the work is performed in a competent manner and with the requisite skill and that the work is done timely, safely and in accordance with applicable codes and rules. General supervision requires that the review of the work be performed in person by the licensee while the work is in progress.
 - (2) Each business office for which a licensee is responsible shall be actively and locally supervised by that licensee who shall have primary responsibility and a corresponding amount of time personally involved in the work contracted for or performed by that office.

*History Note: Authority G.S. 8754; 8758(g);
Eff. May 1, 1988;
Amended Eff. August 1, 2004; July 1, 2000; April 1, 1989.*

21 NCAC 60 .0312 CHANGE OF TRADE NAME

The trade name under which a license is issued may be changed upon request to and approval by the Board. The last license issued to the licensee must be returned to the Executive Director along with the form provided by the Board.

*History Note: Authority G.S. 8754; 8760;
Eff. December 1, 1993.*

21 NCAC 60 .0313 PROCESSING FEE FOR SUBMITTAL OF BAD CHECK

Any person or firm submitting to the Board a check which is subsequently returned to the Board because of insufficient funds in or no account at a bank will be charged the maximum processing fee allowed by G.S. 25-3-512. Until such time as the payer of such a bad check has made the check good and paid the prescribed processing fee, the payer will not be eligible to take an examination, obtain a license or have a license renewed.

*History Note: Authority G.S. 8754; 8763;
Eff. December 1, 1993.*

21 NCAC 60 .0314 USE OF LICENSE

- (a) The licensed contractor shall not permit the use of his license by any other person.
- (b) All refrigeration contracting business, including all business advertising and the submission of all documents and papers by a licensee of the Board shall be conducted in the exact name in which the refrigeration contracting license is issued.
- (c) Should a licensee terminate his relationship from a company in which his license is issued, work begun prior to such termination may be completed under such conditions as the Board shall direct subject to the following conditions deemed applicable by the Board under the unique facts and circumstances of each instance:
 - (1) the percentage of the project completed;
 - (2) the time that may elapse before another licensee can be employed for the project;
 - (3) the size and complexity of the project;
 - (4) the experience and qualifications of remaining personnel;
 - (5) any prior disciplinary record the company involved licensees has with the Board;
 - (6) the financial accountability of the firm;
 - (7) whether or not the remaining firm has any other occupational licenses.

However, no work for which a license is required under G.S. 87-58 may be bid for, contracted for or initiated prior to said company obtaining a license.

*History Note: Authority G.S. 8754; 8757;
Eff. December 1, 1993;
Amended Eff. April 1, 1997; August 1, 1995.*

21 NCAC 60 .0316 CHANGE OF ADDRESS

All licensees shall notify the Board in writing within 30 days of any change of address or business location.

*History Note: Authority G.S. 87-58;
Eff. July 1, 2000.*

SECTION .0400 BOARD PERSONNEL

**21 NCAC 60 .0401 SUPERVISION OF STAFF
21 NCAC 60 .0402 QUALIFICATIONS FOR EMPLOYMENT**

*History Note: Authority G.S. 8754; 150B11(1);
Eff. February 1, 1976;
Readopted April 17, 1978;
Amended Eff. February 1, 1981;
Repealed Eff. May 1, 1988.*

**21 NCAC 60 .0403 SALARY REVIEW COMMITTEE
21 NCAC 60 .0404 SALARIES AND FRINGE BENEFITS**

*History Note: Authority G.S. 8754; 150B11(1);
Eff. February 1, 1981;
Amended Eff. October 1, 1984;
Repealed Eff. May 1, 1988.*

SECTION .0500 PETITIONS FOR RULES

21 NCAC 60 .0501	PETITION FOR RULEMAKING HEARINGS
21 NCAC 60 .0502	CONTENTS OF PETITION
21 NCAC 60 .0503	DISPOSITION OF PETITIONS

History Note: Authority G.S. 8754; 150A16;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.

SECTION .0600 NOTICE OF RULEMAKING HEARINGS

21 NCAC 60 .0601	TIMING OF NOTICE
21 NCAC 60 .0602	NOTICE MAILING LIST
21 NCAC 60 .0603	ADDITIONAL INFORMATION

History Note: Authority G.S. 8754; 150A12(a)(2); 150A12(b); 150A12;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.

SECTION .0700 RULEMAKING HEARINGS

21 NCAC 60 .0701	REQUEST TO PARTICIPATE
21 NCAC 60 .0702	CONTENTS OF REQUEST: GENERAL TIME LIMITATIONS
21 NCAC 60 .0703	RECEIPT OF REQUEST: SPECIFICATION LIMITS
21 NCAC 60 .0704	WRITTEN SUBMISSIONS
21 NCAC 60 .0705	PRESIDING OFFICER: POWERS AND DUTIES
21 NCAC 60 .0706	STATEMENT OF REASONS FOR DECISION
21 NCAC 60 .0707	RECORD OF PROCEEDINGS
21 NCAC 60 .0708	EMERGENCY RULES

History Note: Authority G.S. 8754; 150A11; 150A12(a),(e); 150A13;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.

SECTION .0800 DECLARATORY RULINGS

21 NCAC 60 .0801	SUBJECTS OF DECLARATORY RULINGS
21 NCAC 60 .0802	SUBMISSION OF REQUEST FOR RULING
21 NCAC 60 .0803	DISPOSITION OF REQUESTS
21 NCAC 60 .0804	RECORD OF DECISION
21 NCAC 60 .0805	DEFINITION

History Note: Authority G.S. 8754; 150A11; 150A17;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.

SECTION .0900 ADMINISTRATIVE HEARING PROCEDURES

21 NCAC 60 .0901	RIGHT TO HEARING
21 NCAC 60 .0902	REQUEST FOR HEARING
21 NCAC 60 .0903	GRANTING OR DELAYING HEARING REQUESTS
21 NCAC 60 .0904	NOTICE OF HEARING
21 NCAC 60 .0905	WHO SHALL HEAR CONSENT CASES
21 NCAC 60 .0906	PETITION FOR INTERVENTION
21 NCAC 60 .0907	TYPES OF INTERVENTION
21 NCAC 60 .0908	DISQUALIFICATION OF HEARING OFFICERS

History Note: Authority G.S. 8754; 150A2(2); 150A23(a) through 150A23(d); 150A32; 1A1, Rule 24;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.

SECTION .1000 ADMINISTRATIVE HEARINGS: DECISIONS: RELATED RIGHTS AND PROCEDURES

21 NCAC 60 .1001	FAILURE TO APPEAR
21 NCAC 60 .1002	SIMPLIFICATION OF ISSUES
21 NCAC 60 .1003	SUBPOENAS
21 NCAC 60 .1004	FINAL DECISION OF ADMINISTRATIVE HEARINGS
21 NCAC 60 .1005	PROPOSALS FOR DECISIONS

History Note: Authority G.S. 8754; 150A25(a); 150A27; 150A31; 150A33; 150A34(a); 150A43;
Eff. February 1, 1976;
Readopted Eff. April 17, 1978;
Repealed Eff. February 1, 1981.

SECTION .1100 DISCIPLINARY ACTION

21 NCAC 60 .1101	GENERAL
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History Note: Authority G.S. 8759; 8763; 150B11(1);
Eff. February 1, 1981;
Repealed Eff. April 1, 1989.

21 NCAC 60 .1102	PREFERRING CHARGES
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(a) Any person who believes that any refrigeration contractor is in violation of the provisions of G.S. 8759 may prefer charges against such contractor by setting forth the charges in writing with particularity including, but not limited to, the date and place of the alleged violation. Such charges shall be signed and sworn to by the party preferring such charges and filed with the Executive Director of the State Board of Refrigeration Examiners at the office of the Board, Suite 208, 893 Highway 70 West, Garner, North Carolina 27529.

(b) A licensee who prefers charges against a refrigeration contractor shall cooperate with the Board in its investigation of the complaint including the execution of an affidavit covering their knowledge of the facts and circumstances concerning the complaint, if required, and participate in any legal action authorized by the Board if requested by the Board or its representative.

(c) A licensee shall fully cooperate with the Board in connection with any inquiry it shall make. Full cooperation includes responding in a timely manner to all inquiries of the Board or representative of the Board and claiming Board correspondence from the U.S. Postal Service.

History Note: Authority G.S. 8759;

Eff. February 1, 1981;

Amended Eff. August 1, 2004; July 1, 2000; August 1, 1995; December 1, 1993; April 1, 1989; December 1, 1987.

21 NCAC 60 .1103 PRELIMINARY DETERMINATION

(a) A charge, filed under Rule .1102 of this Section, shall be referred initially to a review committee.

(b) The review committee shall be made up of the following individuals:

- (1) one officer, other than the Chairman, of the State Board of Refrigeration Examiners,
- (2) the legal counsel of the Board,
- (3) the Executive Director of the State Board of Refrigeration Examiners.

(c) The review committee shall have the authority to determine prior to a full Board hearing whether or not charges filed against a refrigeration contractor are unfounded, frivolous or trivial. The determination of the review committee shall be final in this respect.

(d) Once a charge is referred to the review committee a written notice of said charge shall be forwarded to the licensee against whom the charge is made. Notice of the charge and of the alleged facts and circumstances surrounding the charge shall be given personally or by registered or certified mail, return receipt requested. A response to said charges shall be requested of the licensee so charged and shall be made within twenty days from the date shown on the return mail certificate or date of personal notice.

(e) If the licensee denies the charges brought against him, then in the sole discretion of the review committee, additional investigative personnel may be retained by the Board for the purpose of obtaining evidence relating to such charges. The reasonable expenses of any such additional personnel shall be borne by the Board.

(f) After all preliminary evidence has been received by the review committee it shall make a preliminary determination of the charges filed against the refrigeration contractor. From the evidence it may recommend to the Board that:

- (1) the charges be dismissed as unfounded, frivolous, trivial; or
- (2) when the charge is admitted by the licensee or the evidence warrants, the Board be presented with the charge for its decision. If the charge is of such gravity as to make the imposition of punitive sanctions likely, the Board may administer one or more of the following penalties if the licensee is found to have violated the provisions of Article 5 of Chapter 87 of the General Statutes;

- (A) Reprimand;
- (B) Suspension from practice for a period not to exceed 12 months;
- (C) Probationary revocation of license upon conditions set by the Board as the case shall warrant with revocation upon failure to comply with the conditions; or
- (D) Revocation of license; or
- (E) An acceptance of an offer in compromise of the charge, as provided by G.S. 87-59(d).

(3) if the charge is denied and evidence warrants, or if the charge, while admitted, is of such gravity as to make the imposition of punitive sanctions likely, the charge be presented to the Board for its decision on the merits of the charge in accordance with G.S. 150B. In connection with any such reprimand and subsequent order the Board may also provide that in the event the licensee is determined to have violated in the future any of the provisions of G.S. 87, Article 5, the Board may suspend or revoke his license as prescribed by law.

*History Note: Authority G.S. 8757; 8759; 150B38;
Eff. February 1, 1981;
Amended Eff. November 1, 1995; December 1, 1993; April 1, 1989; May 1, 1988.*

21 NCAC 60 .1104 JUDICIAL REVIEW

*History Note: Authority G.S. 8759; 8763; 150B11(1); 150B43;
Eff. February 1, 1981;
Amended Eff. May 1, 1988;
Repealed Eff. April 1, 1989.*