



Candidate Information Bulletin

State of Ohio

Contractor Trade Examinations

The Ohio Construction Industry Licensing Board (OCILB), Department of Commerce, Division of Industrial Compliance issues state commercial licenses to the following contractors: electrical, HVAC, hydronics, plumbing, and refrigeration.

The OCILB has contracted with Prometric Inc. to conduct its examination program.

At a glance

This bulletin is your guide to the process of obtaining an Ohio contractor trade license. The steps below summarize the process. For information about a step, go to the page listed.



To obtain your license

- 1 Submit your exam application and appropriate fees to the OCILB—Page 2.
- 2 Once the OCILB approves your application, you will be notified by the Board and will receive an examination packet.
- 3 Schedule an appointment with Prometric to take your exam(s)—Page 2.
- 4 Prepare for your exam, using the content outlines in this bulletin and other materials—Page 6.
- 5 Present your required identification at the Prometric test center and take the exam—Page 4.
- 6 Once you pass your exam, refer to the exam packet you received from the OCILB regarding your next steps in the licensure process.



To get answers not provided in this bulletin

For questions about exams:

Prometric
 ATTN: OH Contractor Trade Program
 1260 Energy Lane
 St. Paul, MN 55108
 Phone: 800.796.9860, ext. 4832
 TDD User: 800.790.3926
www.prometric.com/Ohio

For questions about applications and licensing:

Ohio Construction Industry Licensing Board
 6606 Tussing Road, P.O. Box 4009
 Reynoldsburg, OH 43068-9009
 Phone: 614.644.3493
www.com.state.oh.us/dic/dicocilb.htm

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Submitting your exam application

You must obtain an exam application form from the OCILB or online at www.com.state.oh.us/dic/diclicreq.htm. Complete the application and mail it with the appropriate fees and other required information to the OCILB. The OCILB will review your application to determine your eligibility to sit for an exam.

All applicants for contractor commercial licenses **must** take the Ohio Contractor's Business and Law exam in addition to any required trade-specific exam. If you decide to become licensed in another trade at a later date, you only have to pass the Business and Law exam once every three years.

You will be notified by mail of the OCILB's decision. If the OCILB approves your application, you will receive an exam scheduling packet. Upon receipt of this packet, you must schedule your exam(s) with Prometric.



Important Once the OCILB approves your application, you are required to obtain a BCI background check prior to sitting for the exam. OCILB approval is valid for one year. If you have not obtained a background check or taken your exam after one year, you will need to reapply for eligibility to sit for an exam.

Scheduling an exam appointment

Once your application has been approved, OCILB will notify Prometric of your eligibility to take an exam. You must then schedule an appointment to take your exam and pay for your exam one of two ways:

- 1 **Online** at www.prometric.com/Ohio/OHCON.
- 2 **By calling** 800.796.9860, ext. 4832. (Please record and retain the number you are given at the end of the call confirming your appointment.)

Exam fees. Fees are \$60 per exam. You may pay the exam fee(s) by Visa, MasterCard, or e-check. **Exam fees are nonrefundable and nontransferable.**

Testing centers. Your exam will be given by computer at a Prometric testing center. You may test at any Prometric testing center in the United States. A list of testing centers convenient to Ohio candidates can be found on Page 3.

Holidays. Testing generally does not occur on the following holidays:

- New Year's Day
- Martin Luther King Jr. Day
- Presidents' Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day



Note Once the OCILB notifies Prometric that you are eligible to take an exam, you have one year to schedule and take your exam. After one year, your exam eligibility will expire and you will need to submit another application form before being able to take an exam.

Special consideration

ADA accommodation. If you require testing accommodations under the Americans with Disabilities Act (ADA), please call Prometric at 888.226.9406 to obtain an accommodation request form. Reasonable testing accommodations are provided to allow candidates with documented disabilities recognized under the Americans with Disabilities Act an opportunity to demonstrate their skills and knowledge.

Submit professional documentation of your disability with your form to help us determine the necessary testing arrangements. Thirty days' advance notice is required for all special testing arrangements. There is no additional charge for these accommodations.

ESL note. If English is your second language, please note that a language barrier is not considered a disability.

Test center locations

Prometric test center locations in Ohio are listed below. A list of testing centers in other states is available online at www.prometric.com/Ohio. Test center locations are subject to change.

Test Sites	Address
Beavercreek 937.427.8809	2365 Dayton Xenia Road Beavercreek, OH 45434
Cincinnati 513.671.7030	11353 Reed Hartman Highway, Suite LL50 Cincinnati, OH 45241
Cleveland 216.368.1030	10900 Euclid Avenue, Testing Services Sears 440 Cleveland, OH 44106
Maumee 419.482.0508	1745 Indian Wood Circle Suite 110, Maumee, OH 43537
Mentor 440.255.0055	8880 Mentor Avenue Mentor, OH 44060
Niles 330.652.1886	950 Youngstown Warren Road Square One Center, Suite D Niles, OH 44446
Stow/Akron 330.922.5587	3500 Hudson Drive, Suite 4 Stow, OH 44224-2907
Strongsville 440.238.0530	15201 Pearl Road Strongsville, OH 44136
Worthington/Columbus 614.431.2083	933 High Street, Suite 130B Worthington, OH 43085

Rescheduling your appointment

To avoid an additional fee, you must contact Prometric at least **three full business days** (does not include weekends and holidays) before the day of your originally scheduled appointment.

Rescheduling fees will apply as follows:

- **No fee** if you reschedule on the fourth business day or sooner prior to your appointment date.
- **Another full examination fee** if you reschedule one to three business days before your appointment date, **or** on or after your appointment date.



Note This schedule **does not** include holidays since holidays are not business days. You will need to call earlier if a holiday is involved.

Call Prometric at 800.796.9860, ext. 4832 to reschedule your appointment.

If absent or late for your appointment

If you miss your appointment, or arrive late and are not allowed to test, you will need to pay another full exam fee and reschedule your exam.

If you are unable to attend your scheduled exam due to illness or emergency, call Prometric. Under certain circumstances, the rescheduling process may be waived.

Prometric reserves the right to request documentation to support any illness or emergency claim.

Emergency closings

Severe weather or an emergency could require canceling scheduled exams. If this occurs, Prometric will attempt to contact you by phone or e-mail; however, you may check for testing site closures by calling Prometric. If the site is closed, your exam will be rescheduled without a rescheduling fee.

If a testing center is open for testing and you choose not to appear for testing, your fee will be forfeited and you will need to resubmit a new exam registration form and pay the exam fee(s) again.

Process on exam day

Exams are administered using Prometric's user-friendly, Microsoft Windows®-based, computerized testing system. You do not need computer experience to use this system. In fact, you only use five keys on the entire keyboard to take the test. The other keys are disabled. There is no way you can damage your test by accidentally touching a wrong key.

Arrival. You should arrive at least 30 minutes before your scheduled examination appointment in order to verify your identification and allow time for you to sign in.

Identification. You must present a valid form of identification before you can test. That identification document **must**:

- Be government-issued (e.g., driver's license, state-issued identification card, military identification card or current passport).
- Contain **both** a current photo and your signature.
- Have a name that exactly matches the name used to register for the exam (including designations such as "Jr." and "III").



Important Failure to provide appropriate identification at the time of the exam is considered a missed appointment and a rescheduling fee will be charged.

If you cannot provide the identification listed above, contact Prometric **before** scheduling your appointment to arrange an alternative way to meet this requirement.

Testing regulations

To ensure that all candidates are tested under equally favorable conditions, the following regulations and procedures will be observed at each testing center. Failure to follow any of these security procedures may result in disqualification of your examination. Prometric reserves the right to audiotape and videotape any examination session.

References

- Approved references are allowed for open-book exams (see Content Outlines beginning on Page 6 for which references are allowed for each exam). Photocopies of reference materials may **not** be used. No handwritten or additional notes (letters, words, diagrams, etc.) are allowed in reference books. Highlighting and permanent tabbing added before your arrival at the test center are acceptable. Post-it® notes are not considered permanent tabbing and will not be allowed.
- Reference materials will be checked at the exam site before and after the exams. Any reference material that has been written in during the exam will be confiscated.
- Sharing reference materials is not allowed.

- No other reference materials, papers or study materials are allowed at the test center. If you are found with these or any other aids, you will not be allowed to continue the exam and your answers will not be scored.

Calculators

- Candidates may bring a silent, handheld, solar or battery-operated, nonprogrammable calculator (without paper tape-printing capabilities or alphabetic keypads) to use during the exam.

Personal items

We recommend that you avoid bringing personal items to the testing center. Note the following:

- Electronic equipment—cell phones, PDAs, pagers, cameras, tape recorders, etc.—is not permitted in the testing area.
- Pocket items—keys, wallet, etc.—must remain in your pocket during testing.
- Other personal items—digital watches, outerwear that is not being worn while testing (sweater, jacket, etc.), briefcases, purses, etc.—are not permitted in the testing room.

Breaks

- If you leave the testing room while an exam is in progress, you must sign out/in on the roster and you will lose exam time.
- You are not allowed to use any electronic devices or phones during breaks.

Visitors

- No guests, visitors or family members are allowed in the testing area.

Misconduct or disruptive behavior

- Candidates who engage in any kind of misconduct or disruptive or offensive behavior may be dismissed from the examination. Examples are: giving or receiving help, sharing supplies, taking part in an act of impersonation, removing test materials or notes from the testing room, using rude or offensive language and behavior that delays or interrupts testing.

Weapons

- Weapons are not allowed at the testing center.



Important Before an exam begins, the test center administrator will inspect all briefcases, purses, and so on to ensure that candidates are not in violation of any of these rules. The administrator will collect any materials that violate the rules.

Copyrighted questions. All test questions are the copyrighted property of Prometric Inc. It is forbidden under federal copyright law to copy, reproduce, record, distribute or display these test questions by any means, in whole or in part, without our written permission. Doing so may subject you to severe civil and criminal penalties, including up to five years in prison and/or a \$250,000 fine for criminal violations.

If questions arise. Test center administrators are not allowed to answer any questions pertaining to the exam content. If you do not understand a question on the examination, you should answer the question to the best of your ability.

Your exam results

At the end of your exam, your score will be shown on the screen and you will receive a printed score report. The report will indicate **Pass** or **Fail**. Exam results are confidential and will be revealed only to the applicant and the OCILB.

Passing score. A score of 70 percent or above is required to pass each exam. Once you pass both your exams, you should refer to the exam packet you received from the OCILB regarding what steps you need to take to receive your license.

Retake information. If you do not pass the exam, you must register for a new exam. Please note that you must wait two business days for your results to be processed before scheduling a retake appointment.

Duplicate score reports. You may call or write to Prometric to request a duplicate of your score report. You will be charged a \$15 processing fee per report.

Certificates of Achievement. Candidates passing their exams deserve recognition for their accomplishment. Prometric has prepared a beautifully designed 8.5"×11" certificate of achievement. This certificate is suitable for framing and contains your name and the name of the exam you successfully completed in a calligraphy typeface. The cost is \$30.

Appeals process

Our goal is to provide a quality exam and a pleasant testing experience for every candidate. If you are dissatisfied with either and believe we can correct the problem, we would like to hear from you. We provide an opportunity for general comments at the end of your exam. Your comments will be reviewed by our personnel, but you will not receive a direct response.

If you are requesting a response about exam content, registration, scheduling or test administration (testing site procedures, equipment, personnel, etc.), please submit an appeal in writing. Your appeal letter must provide your name and Social Security number, the exam title, the date you tested and the details of your concern, including all relevant facts. Be sure to include your signature and return address. Mail your appeal letter to:

Prometric
ATTN: Appeals Committee
1260 Energy Lane
St. Paul, MN 55108

The Appeals Committee will review your concern and send you a written response within 10 business days of receipt. **Faxed appeals are not accepted** because an original signature is required.

Exam content outlines

The following pages contain the content outlines for the Ohio contractor exams. These outlines are the basis of the exams and list all subjects covered by each exam. Each outline indicates the total number of questions on the exam and the maximum time allowed to take the exam. It also lists all topics covered in the exam and the approximate percentage asked about each topic.

Exam references. Each outline lists the references that were used to create the exam, including those that you may use during the exam. For information on how to obtain the exam references, call toll-free 877.624.2562.



Note Some sections of the OCILB have determined that, when a reference is allowed to be used during an exam, candidates may use any edition of the reference (not necessarily the edition used to create the exam). Candidates should confirm with their appropriate OCILB section which references they are allowed to use **prior** to arriving at the test center. Be advised that alternate versions of the references may not contain the correct answers to exam questions.

Ohio Contractor’s Business and Law Exam
Open Book, 50 questions, 2 hours

All contractor license classifications **must** take the Business and Law exam in addition to any required trade-specific exam.

Subject Area	Percent
Business Organization	4
Licensing	6
Estimating and Bidding	12
Contract Management	10
Project Management	12
Insurance and Bonding	10
OSHA Recordkeeping	10
Personnel Regulations	10
Financial Management	12
Tax Laws	10
Lien Laws	4

Reference used to create exam questions.
You may use this reference during the exam.

1	<i>Ohio Contractors Business and Law Reference Manual</i> , Third Printing, 2008, 2005, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org .
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Ohio Electrical Contractor Exam
Open Book, 100 questions, 5 hours

Scope – Electrical contractors must have the knowledge and skill to install, repair, alter, add or change any electrical wires fixtures, appliances, apparatus, raceways, conduit or any part thereof that generates transmits, transforms or utilizes electrical energy in any form for light, heat, power or communications.

Subject Area	Percent
General Electrical Knowledge	10
Transformers and Equipment	12
Services, Feeders and Branch Circuits	16
Raceways, Boxes and Panelboards	10
Conductors and Cables	12
Control Devices	8
Motors and Generators	12
Utilization Equipment	8
Special Occupancies and Equipment	12

Reference used to create exam questions.
You may use this reference during the exam.

1	<i>NFPA 70 – National Electrical Code</i> , 2008 Edition, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101, www.nfpa.org .
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This reference was also used to create exam questions but you are not allowed to use it during the exam.

1	<i>Mike Holt’s Illustrated Guide to Basic Electrical Theory</i> , Second Edition, 2007, Mike Holt Enterprises, Inc., 3604 Parkway Blvd., Suite 3, Leesburg, FL 34748, www.NECCode.com .
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Ohio HVAC Contractor Exam
Open Book, 100 questions, 4 hours

Scope – Those who are qualified to install, maintain, repair, fabricate, alter or extend central air conditioning, heating and ventilating, including ductwork within a complete system and all appurtenances, apparatus, piping vessels, ducts and insulation used in connection therewith.

Subject Area	Percent
General Knowledge and Requirements	10
Warm Air Heating and Air Distribution	25
Ventilation and Exhaust Systems	15
Air Conditioning	10
Piping Systems	10
Equipment and Appliances	20
Testing and Inspections	10

References used to create exam questions.
You may use these references during the exam.

1	<i>International Fuel Gas Code</i> , 2006, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org .
2	<i>Ohio Mechanical Code</i> , 2007, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org .
3	<i>Modern Refrigeration and Air Conditioning</i> , Eighteenth Edition, 2004, Goodheart-Willcox Company, Inc., 18604 West Creek Drive, Tinley Park, IL 60477-6243, www.g-w.com .

Ohio Hydronics Contractor Exam
Open Book, 50 questions, 2-1/2 hours

Scope – Hydronics contractors must have the knowledge and skill to construct, install, alter, repair, maintain or service any steam and hot-water heating or chilled-water refrigeration systems.

Subject Area	Percent
General Knowledge	18
Heating Equipment	20
Piping, Pumps and Valves	20
Fuel Gas and Oil	16
Venting	10
Controls	10
Tests and Inspections	6

References used to create exam questions.
You may use these references during the exam.

1	<i>International Fuel Gas Code</i> , 2006, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org .
2	<i>Ohio Administrative Code, Chapter 4101:4 Boiler and Unfired Pressure Vessel Rules</i> , Effective 2007, Ohio Division of Industrial Compliance, 6606 Tussing Road, P.O. Box 4009, Reynoldsburg, OH 43068-9009, www.com.ohio.gov/dico .
3	<i>Ohio Mechanical Code</i> , 2007, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org .

These references were also used to create exam questions but you are not allowed to use them during the exam.	
1	<i>Boiler Operator's Guide</i> , Fourth Edition, 1998, McGraw-Hill Publishing, Inc., P.O. Box 182604, Columbus, OH 43272, books.mcgraw-hill.com.
2	<i>Modern Hydronic Heating for Residential and Light Commercial Buildings</i> , Second Edition, 2004, Delmar Learning, P.O. Box 6904, Florence, KY 41022, www.delmarlearning.com.

Ohio Plumbing Contractor Exam
Open Book, 100 questions, 4 hours

Scope – The practice, materials and fixtures utilized in the installation, maintenance, extension and alteration of all piping, fixtures, plumbing appliances and plumbing appurtenances, within or adjacent to any structure, in connection with sanitary drainage or storm drainage facilities; venting systems; and public or private water supply systems.

Subject Area	Percent
General Knowledge	8
General Regulations	20
Plumbing Fixtures	6
Water Supply Systems	10
Drainage, Waste and Sanitary Vents	24
Indirect Waste	4
Roof Drain Piping	3
Specialty Plumbing	5
Isometric Analysis	20

References used to create exam questions. You may use these references during the exam.	
1	<i>International Fuel Gas Code</i> , 2006, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
2	<i>Ohio Plumbing Code</i> , 2007, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org, or www.com.state.oh.us/dic/dicbbs.htm.

These references were also used to create exam questions but you are not allowed to use them during the exam.	
1	<i>Mathematics for Plumbers and Pipefitters</i> , Seventh Edition, 2008, Delmar Learning, P.O. Box 6904, Florence, KY 41022, www.delmarlearning.com.
2	<i>Modern Plumbing</i> , 2005 Edition, Goodheart-Willcox Company, Inc., 18604 West Creek Drive, Tinley Park, IL 60477-6243, www.g-w.com.

Ohio Refrigeration Contractor Exam
Open Book, 60 questions, 3 hours

Scope – Tests a candidate's knowledge to install, maintain, repair or alter any system of refrigeration unlimited to tons or horsepower provided, however, that such refrigeration is intended to be used for the purpose of food and product preservation and is not to be used for comfort systems.

Subject Area	Percent
General Knowledge and Requirements	30
Refrigeration Piping	20
Refrigerants	10
Refrigeration Systems and Controls	25
Testing and Inspection	15

References used to create exam questions. You may use these references during the exam.	
1	<i>Ohio Mechanical Code</i> , 2007, International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
2	<i>Modern Refrigeration and Air Conditioning</i> , Eighteenth Edition, 2004, Goodheart-Willcox Company, Inc., 18604 West Creek Drive, Tinley Park, IL 60477-6243, www.g-w.com.

Sample questions

Exam questions are in a four-option, multiple-choice format with one correct answer. The following samples may be useful to review for the type of questions that may be included in the exam.

- 1 Conductors within electrical nonmetallic tubing may be a **MAXIMUM** of
 - a 300 volts
 - b 450 volts
 - c 500 volts
 - d 600 volts
- 2 The type of insurance coverage used to insure the owner or contractor against loss that is the result of a storm is
 - a builder's risk.
 - b general liability.
 - c professional liability.
 - d property floater policy.
- 3 What is the **MAXIMUM** developed length that a branch vent must exceed before the size of the vent must be increased by one nominal pipe size for the entire length of the vent?
 - a 20'
 - b 30'
 - c 40'
 - d 50'
- 4 What is the purpose of a crankcase heater on air conditioning compressor? (HVAC)
 - a To evaporate any liquid refrigerant trapped in the oil.
 - b To keep the oil at the desired viscosity for best operation.
 - c To evaporate any condensation (moisture) trapped in the oil.
 - d To thin the oil for easier start-up.
- 5 Copper water heating pipes will be installed in a new single-story home. All lines are 1-1/4 inch or less. There are two 30-foot, three 15-foot, and six 10-foot horizontal runs, with one 8-foot and eight 4-foot vertical lines attached at the ends of the horizontal runs. What is the maximum spacing of pipe hangers permitted to support the horizontal runs? (hydronics?)
 - a 4 feet
 - b 6 feet
 - c 10 feet
 - d 12 feet
- 6 A commercial air conditioning unit using urethane foam pipe insulation is low on refrigerant. What is the best detection technique to locate the leak? (refrigerant?)
 - a A soap and water bubble solution
 - b A refrigerant dye leak detector
 - c A halide torch leak detector
 - d An electronic leak detector

Answers to sample questions: 1-D; 2-A; 3-C; 4-A, 5-D, 6-A.