

Indiana -City of Richmond

Candidate Information Bulletin

FREQUENTLY ASKED QUESTIONS

- 1. **How do I register to test?** To register and schedule for testing, go to:
 - https://www.provexam.com/scheduler. You may also call us toll-free at 877-228-3926. Click here for more information about registering.
- 2. WHERE CAN I TEST? You may test at any one of Prov's testing centers. Click here for a current list of each of our testing centers.
- How Much Does it cost? Each examination costs \$100 each. This fee is the same whether you are testing for the first time or are retaking an exam.
- 4. WHEN DO I GET MY TEST RESULTS? The results from your examination will be provided to you at the exam site or sent to you via email.
- 5. What is on the test? <u>Click here</u> for information about the available examinations.

MORE QUESTIONS

Please read through this handbook completely for answers to your questions. If you still have unanswered questions, you may contact us at the following:

For Licensing Questions -City of Richmond 50 North 5th Street Richmond, IN 47374 Ph: (765) 983-7341

https://www.richmondind ana.gov/ Hours: 8:30 a.m. to 4:30

p.m.

For Testing Questions Prov
200 W Civic Center Drive
Suite 160
Sandy, Utah 84070
Phone: (877) 228-3926
www.provexam.com
Hours: 6 a.m. to 10 p.m.

GENERAL TESTING INFORMATION

The Division has contracted with Prov, Inc. to administer the **Master Electrician** and **Master Mechanical** examinations.

The purpose of this handbook is to provide you with information about taking your licensing examinations in Richmond.

EXAMINATION CATEGORIES & COST

The examinations cost **\$100** for each exam. The fee is the same whether you are testing for the first time or if you are retaking the exam.

You are responsible for ensuring that you take the correct examination for your license.

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TESTING WITH PROV

Your exam will be administered by computer at one of Prov's testing centers. Prov's testing system is easy to use and requires no specific computer experience to take the test.

The following link will take you to a short video that demonstrates Prov's testing system:

https://youtu.be/h3T9svnIdLY.

WHERE TO TAKE YOUR EXAM

You may take your examination at any of Prov's testing facilities nationwide. Within Indiana, Prov has fifteen (15) testing centers where candidates can take their examinations. These testing centers are located in Anderson, Evansville, Fort Wayne, Hammond, Indianapolis, Kokomo, Lafayette, Lawrenceburg, Logansport, Muncie, New Albany, Plainfield, Richmond, Terre Haute, and Westmont. Site addresses and testing availability are provided at the end of this bulletin.

How to Register Online

- 1. To schedule online, navigate to the following URL: https://www.provexam.com/register
- 2. Use the Dropdown menu under "Select Certifying Body", and select:
 - a. Indiana
 - i. City of Richmond
- Under "Select a License/certificate", choose the license (and language) you are seeking (choose one of the following):
 - Master Electrician
 - Master Mechanical

Then press

NEXT

- 4. Enter your information **exactly** as it appears on your government issued ID.
 - Name (First, Middle and Last)
 - Social Security number
 - Street address
 - City, State, Postal Code
 - Email Address
 - Telephone Number

Then select the button labeled:

SAVE CHANGES

5. Select a Date, Time, Location for each exam by selecting the link labeled:



Find suitable time and venue

 Prov's scheduling system will search for the closest testing centers to the address you entered. Select the SCHEDULE hyperlink to check the calendar for a specific testing center.

- 7. Select a test **date** and **time** from the calendar that matches your schedule. Confirm your selected date and time and select **Add to Cart.**
- 8. Proceed to payment. Please enter your form of electronic payment (e.g. MasterCard, Visa, AMEX). If you have provided an email address, the invoice for your exam payment will be automatically emailed to you. This invoice will include information regarding your scheduled date/time.

If you have any problems with online scheduling, give us a call at (866) 720-7768.

SCHEDULING BY PHONE

To schedule for an examination by phone, candidates should contact Prov toll free at (866) 720-7768. Prov scheduling staff is available 8:00 a.m. through 12:00 p.m. ET, Monday through Friday.

Candidates should be prepared to provide the Prov scheduling staff with their full name (first, middle, last), social security number and their address. Once registered in the database, Prov staff will search for the next available testing session at the candidate's preferred testing location and will provide candidates with any alternate locations that may be in close proximity to their address. Once candidates are scheduled, Prov staff will email a confirmation.

CANCEL/RESCHEDULING POLICY

If you need to change or cancel your testing appointment, you must contact Prov at least **three (3) business days** prior to your scheduled test date. Rescheduling is free if Prov is notified by the deadline.

If you fail to appear for their test or fail to cancel or reschedule your testing session by the close of business three days prior to their scheduled test date, you will forfeit your exam fees.

PREPARING FOR YOUR EXAM

The licensing examination that you will take has been designed to test what qualified individuals should know as they work in the Electrician or Mechanical fields. The test questions used on the examinations have been prepared and reviewed by a panel of qualified individuals and cover the wide range of topics individuals would normally encounter as a master during regular work operations.

Prov recommends that you prepare for your exam by familiarizing yourself with the subject areas listed in each exam description. Additionally, familiarize yourself with the reference materials that are allowed during the examination. The more time you spend outside of the testing room studying, the less time you will need to spend in the testing room trying to locate information. You are encouraged to prepare your test materials by highlighting text or placing permanent tabs on important pages.

EXAM DESCRIPTION

Master Electrician

Those who have the knowledge and skill, to install, repair, alter, add to or change any electrical wires, fixtures, appliances, apparatus, raceways, conduit or any part thereof, which generates, transmits, transforms or utilizes electrical energy in any form for light, heat, power or communications, all in compliance with applicable plans, specifications, codes, laws and regulations.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
General Electrical Knowledge	12
Communication Systems	3
Equipment for General Use	6
Motors & Controls	4
Plan Reading	3
Special Conditions	4
Special Equipment	3
Special Occupancies	2
Wiring & Protection	18
Wiring Methods & Materials	20

References

- American Electricians' Handbook, 15th Edition.
 ISBN: 978-0-07-149462-5. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004.
 Available at www.amazon.com
- NFPA 70 National Electrical Code, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Master Mechanical

Master Mechanical shall mean any person whose services are unlimited in the execution of contracts requiring the experience, knowledge, and skill to perform the following; install maintain, repair, fabricate, alter, extend or design (when not prohibited by law) central air conditioning, refrigeration, heating and ventilation (including duct work in connection with a complete system only to the extent such duct work is performed by the Contractor necessary to make complete an air distribution system) boiler and unfired pressure vessel systems, lift stations, equipment and piping and all appurtenances, apparatus, or equipment used in connection therewith; also piping, insulation of pipes, vessels and ducts, pressure and process piping, pneumatic control piping, gasoline tanks and pump installation and piping for same, fire sprinkling systems and standpipes, air piping, vacuum line piping, oxygen lines, nitrous oxide piping, ink and chemical lines, fuel transmission lines and installation of a condensate drain from an air conditioning unit to an existing safe waste or other approved disposal other than a direct connection to a sanitary system, all in such a manner to comply with all plans, specifications, codes, laws and regulations applicable thereto. The scope of work for such Contractor shall not include any work such as liquefied petroleum or natural gas fuel lines within buildings, potable waterlines or connections thereto, sanitary sewer lines, swimming pool piping and filters and electrical power wiring.

Number of Questions	100
Time allowed (hours)	4
Subject Area	# Quest.
General Knowledge	16
Piping	12
Systems & Sizing	31
Equipment	16
Maintenance	16
Plan Reading	9

References

Advanced Mechanical Study Guide, 2nd Edition, ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

HVAC Basics for Contractors, 3rd Edition. ISBN: 13: 9781323725146. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

- Intermediate Mechanical Study Guide, 2015.
 ISBN: 9781323725221. Pearson, 501 Boylston
 Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- International Building Code, 2012. Item: 3000S12.
 International Code Council, 4051 West Flossmoor
 Road, Country Club Hills, IL 60478. Available at www.iccsafe.org or www.provbookstore.com.
- International Energy Conservation Code, 2012.
 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available at www.iccsafe.org.
- International Fuel Gas Code, 2012. Item: 3600S12. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available at www.iccsafe.org or www.provbookstore.com.
- International Mechanical Code, 2012.
 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available at www.iccsafe.org.
- Manual N Commercial Load Calculations, 2008.
 ISBN: 978-1892765383. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. Available at www.amazon.com.
- Residential Load Calculations Manual J, 8th
 <u>Edition</u>. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. Available at www.acca.org.

PRACTICE EXAMS AVAILABLE FROM PROV

Prov also offers practice examinations in several exam categories. Practice examinations cost \$25.00 each and may be ordered either by phone or online at www.provbookstore.com. Practice examinations prices do not include tax nor shipping. Candidates must be sure to use the correct shipping option when ordering.

TEST DAY RULES AND PROCEDURES

Check-in Deadline

The doors to each testing center will open at least 15 minutes before all scheduled testing appointments in order to check candidates into the testing center. You should plan to arrive early to make sure you are seated by the time the testing begins. If you arrive late, AND the testing session has already begun, YOU WILL BE TURNED AWAY, will forfeit your exam fees, and will be required to reschedule for a future testing date.

Proof of Identity

Upon arriving at the testing center, you will be required to show government-issued, photo identification. The photo ID must be current and valid. Additionally, the name on your ID must match exactly with the name you provided to Prov at time of scheduling. Please make any corrections to your name prior to your scheduled testing appointment.

Forms of valid photo-bearing ID are a driver's license card, passport, military ID, or permanent resident card. Paper, temporary, copies or electronic versions of ID are NOT considered acceptable forms of ID. You will also be required to sign a test center log and will be photographed by the test center staff. If you cannot produce a valid government-issued photo ID, refuse to participate in signing the test center log, or refuse to be photographed, you will be dismissed from the testing center and forfeit all testing fees for that testing session. If you do not have a photo ID, you may still present a valid State driver's license without a photo or a State ID card without a photo that is issued by the DMV.

You will be refused to test by the testing center staff if:

- your name on the testing roster and name on ID do not match exactly
- you do not produce a valid government-issued photo ID
- you refuse to sign the test center log
- you refuse to be photographed

If refused at the testing center, you will be dismissed and forfeit all testing fees for that testing session.

Prohibited Items

No cameras, recorders, cell phones, computers, pagers, tablet computers, music players, smart watches, radios, electronic games, or any other electronic devices are allowed in the testing room. Talking and smoking are not allowed in the testing room.

Additionally, other personal items such as purses, notebooks, un-authorized references or study materials, briefcases, backpacks, wallets, pens, pencils, other writing devices, food or any other items should be placed in secure storage at the testing facility.

For exam security you may also be **asked to remove** articles of clothing that may pose a security risk such as the following:

- Bulky clothing, scarves, hoodies, shawls, vests, jackets, coats, and so forth.
- Hats or headgear not associated with religious reasons.
- Any other clothing or device that may be interpreted as having the potential to compromise the testing process.

We ask that you leave all unauthorized materials in your car or vehicle. If you are caught using unauthorized materials during testing, these materials will be confiscated, your testing will be terminated with fees forfeited, and the Division will be notified of your dismissal from the exam.

Visitor Policy

No one other than the candidate will be allowed in the testing room. Non-testing visitors are NOT permitted to wait in the lobby while candidates test.

Unethical Conduct Policy

Any individual caught giving or receiving assistance during or after the examination or caught using unauthorized materials during the examination will be reported directly to the Department. Those caught in the act of cheating will be dismissed from the examination and their testing results will be frozen. Furthermore, the candidate will forfeit the examination fees paid. Finally, anyone caught with test questions in their possession, either during or following the examination will be prosecuted by Prov for theft of copyrighted testing materials.

RESULTS REPORTING

Upon completion of an examination, your test will be scored and you will be provided with a score result while at the testing center.

The required cut-score for your examination is **75%**.

RETESTING POLICY

You may retake a failed examination as often as is necessary. There is no waiting period between testing attempts; you can schedule a new testing session for the first available testing date. You may not, however, retake an exam once you have received a passing score unless required by the City of Richmond. Retake fees are the same as the original exam fees.

REVIEWS

Reviews are intended to help candidates audit their testing results by allowing them to see which questions were missed during testing. You may request a review of your exam only after failing an exam category a minimum of two (2) times. To be eligible for a review, you must score within 10 points of the required passing score. The review for all tests is 1-1/2 hours in length. The review will be conducted under the same testing conditions as the exam using the same test security rules. The cost of the review is the same as the exam fees and based on when you wish to review your test. Candidates will request or schedule a review using the same methods described earlier for scheduling.

EXAM CHALLENGE PROCESS

If during an exam or review, candidates encounter a question they think is inaccurate or otherwise incorrect, they are encouraged to submit an Exam Comment form to Prov detailing why they feel the question is in error. Candidates testing on computers may make their comments in the testing system, while those taking a paper/pencil format exam may submit comments on a comment form that can be obtained from the test proctor at the testing center. Candidates who are reviewing an exam will automatically be provided with an Exam Comment form. Prov staff will review each comment within two weeks of receipt by Prov and will make scoring adjustments should any comment result in a change to the test question.

Prov's Non-Discrimination Statement

Prov provides equal access to its exams and testing programs for all eligible persons. Although individual jurisdictions that Prov represents are wholly responsible for determining eligibility of candidates, it is the policy of Prov to maintain an environment free of discrimination and to prohibit discrimination and harassment against any person on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and veteran, marital or family status.

Harassment of Prov program participants, proctors, staff or candidates will not be tolerated. If candidates wish to express concerns about discrimination, they should contact Prov at 877-228-3926 or write to: Prov, Inc., 200 W Civic Center Drive, Suite 160, Sandy, Utah 84070.

SPECIAL ACCOMMODATIONS

Prov complies with the Americans with Disabilities Act (ADA) in providing special accommodations for candidates that require additional assistance during the testing process.

If candidates feel that they qualify for a special accommodation during testing, they should contact Prov at (877) 228-3926. Prov will require written documentation from a licensed physician or psychologist documenting the disability and further require a request describing the requested remedy. Prov will then work directly with the candidates to make the accommodations they will need in order to complete their examination.

SAMPLE TEST QUESTIONS

The following are sample questions that reflect the format and style of the questions found on exams.

- A vented wall furnace CANNOT be installed within how many inches of the area of a door swing?
 - A. 12".
 - B. 16".
 - C. 18".
 - D. 24".

- 2. When used in an unpressurized system, ABS piping can withstand heat up to:
 - A. 120 degrees F
 - B. 145 degrees F
 - C. 160 degrees F
 - D. 180 degrees F
- 3. Tubing used for refrigerant piping should be cut at what angle?
 - A. 15-degrees
 - B. 30-degrees
 - C. 45-degrees
 - D. 90-degrees
- 4. What is the MINIMUM distance test duration when conducting pressure measurements on a system in a single-family dwelling?
 - A. 10 minutes
 - B. 15 minutes
 - C. 20 minutes
 - D. 30 minutes
- 5. How high above grade must concrete slabs extend when supporting equipment or appliances?
 - A. 3 inches
 - B. 4 inches
 - C. 5 inches
 - D. 6 inches
- Air supplied to mechanical equipment for combustion, ventilation and cooling is classified as standard air with a temperature of:
 - A. 50 degrees F.
 - B. 60 degrees F.
 - C. 70 degrees F.
 - D. 80 degrees F.

- 7. What is the MINIMUM room opening area required for ventilating an adjoining space?
 - A. 5 sq. ft.
 - B. 10 sq. ft.
 - C. 25 sq. ft.
 - D. 50 sq. ft.
- 8. Underground metal ducts NOT having a protective coating must be encased in concrete with a MINIMUM thickness of:
 - A. 1"
 - B. 2"
 - C. 3"
 - D. 4"

ANSWERS TO SAMPLE QUESTIONS

- 1. A
- 2. B
- 3. D
- 4. A
- 5. A
- 6. C
- 7. C
- 8. B

TESTING SITE AVAILABILITY

You may take your exam at any one of Prov's testing centers. Prov has established fifteen (15) testing centers within Indiana where candidates can take their examinations.

You can also take your exam at home using Prov's Examroom® service.

What is Examroom?

Examroom is a remote test monitoring service that allows you to take your test on your own computer at your home. You schedule the test the same way you would an in-person testing site; by selecting your preferred test date and time. Then, on test day, you log into the Examroom website and request to start your exam. A test proctor will greet you over your

computer, will verify your identity, take your picture, and observe you throughout the testing process.

How to decide whether to use Examroom? Not every computer system is capable of taking a test on Examroom. The following are the MINIMUM requirements that your computer system would need to meet in order to qualify to take your test using the Examroom service:

- Operating system on computer needs to be recent (less than 3-4 years old)
- Works on a MAC, PC, or Chromebook
- Need either a Chrome or Firefox browser (Chrome works best)
- Need a functioning computer web-camera and microphone
- Need a good consistent Internet connection capable of uploading files in excess of 3 Mbps Please use the following links to do a system check before you schedule your exam to make sure your computer system will allow you to take a test using this system. https://examroom.ai/systemtest/

When prompted "Permission to access camera and microphone", you must click "Allow".

If your system does not allow you to test at home, don't worry, we have some great testing locations that are not too far away.

Fixed Testing Locations

The sites shown below are fixed locations where you may take your exam. The asterisk (*) on the chart shows which days of the week the exams are available for scheduling. Note that sites may change as needed. Please refer to the current online scheduling system to find available testing times for each location.

	Monday	Tuesday	Nednesday	Thursday	Friday
Test Site Location			>		
Anderson – ITCC AN	*		*		
Evansville – ITCC EV					*
Fort Wayne – PUFW		*			
Hammond – PNW	*	*	*	*	*
Indianapolis – ITCCL					*
Kokomo – ITCCK	*				
Lafayette – ITCCLF		*	*	*	
Lawrenceburg-ITLW	*	*	*	*	*
Logansport - ITCCL	*	*	*	*	*
Muncie - ITCC	*	*	*	*	*
New Albany - IUS		*			
Plainfield - ITCCP			*		
Richmond - ITCCR	*	*	*	*	
Terre Haute – ITCTH			*	*	
Westville – PNW	*	*	*	*	*

Prov has established fifteen (15) testing centers within Indiana where candidates can take their examinations. These testing centers are located in Anderson, Evansville, Fort Wayne, Hammond, Indianapolis, Kokomo, Lafayette, Lawrenceburg, Logansport, Muncie, New Albany, Plainfield, Richmond, Terre Haute, and Westmont. Please refer to the individual list for each site for its testing availability and directions.

- Ivy Tech Community College Anderson
 815 E 60th Street, Room 121
 Anderson, IN 46013
- Ivy Tech Certification Center Evansville
 Certification & Workforce Assessment Center-SW
 3401 N. First Avenue
 Evansville, IN 47710
- 3. Purdue University Fort Wayne2101 East Coliseum Boulevard, Kettler Hall, Room232Fort Wayne, IN 46805

- **4.** Purdue University Northwest Hammond 2200 169th Street, Student Union Library, Rm 318 Hammond, IN 46323
- Purdue University Northwest Westville
 1401 S. US Highway 421
 Westville, IN 46391
- **6.** Ivy Tech Community College Lawrence 9301 E 59th Street Indianapolis, IN 46216
- Ivy Tech Community College Kokomo 1815 E. Morgan Street Kokomo, IN 46901
- **8.** Ivy Tech Community College Lafayette 3101 S. Creasy Lane, Room 1135 Lafayette, IN 47905
- 9. Ivy Tech Certification Center Lawrenceburg50 Walnut Street, Room 439Lawrenceburg, IN 47025
- 10. Ivy Tech Community College Logansport1 Ivy Tech WayLogansport, IN 46947
- **11.** Ivy Tech Community College Muncie 125 South High Street, Room 212, 2nd Floor Muncie, IN 47305
- **12.** Indiana University Southeast 4201 Grant Line Rd., UCS Room 203 New Albany, IN 47150
- **13.** Ivy Tech Certification Center Plainfield 1610 Reeves Road, Testing Services, Room 111 Plainfield, IN 46168
- **14.** Ivy Tech Certification Center Richmond 2357 Chester Boulevard Richmond, IN 47374
- **15.** Ivy Tech Certification Center Terre Haute 1700 East Industrial Drive Terre Haute, IN 47802

TEST SITE INSTRUCTIONS

Written test site instructions are attached to this document that outline testing rules and computer testing navigation information that is very important. Please thoroughly review prior to your scheduled test date.