



Certified Electrical Inspector

Testing on
2017 National Electrical Code



APPLICANT HANDBOOK

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It has been proven that by studying for the examination, you can increase your score.



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The International Association of Electrical Inspectors' mission has always been about safety. This single mission: "To keep family and friends safe from the savage bite of electricity" is the foundation of all of the association's activities. As the various methods of fulfilling this mission have evolved, the character of the association has grown to that of a brotherhood with a serious business commitment. Through that growth has emerged three streams: service, publishing, and education. Each stream is focused on helping IAEI members fulfill the mission in the quickest, most effective way possible.

Education occurs continuously on several levels: training beginning inspectors, training residential inspectors, and training master inspectors. IAEI emphasizes producing qualified inspectors who are certified to a nationally recognized certification process. Hundreds of hours are invested in preparing seminar programs. Detailed drawings that explicitly demonstrate concepts or procedures are created. Innumerable requests for code interpretations are fielded on a daily basis.

Publishing has proven to be the most effective method of spreading information. From the bimonthly magazine that offers timely and significant articles that have direct relevance to the members to various textbooks, electronic media, and the website, highly trained and dedicated staff and contributors invest thousands of hours collecting material, writing, editing, and producing quality materials that promote electrical safety.

Service is about more than facilitating membership needs. It is about researching solutions to dangerous situations observed by inspectors during their field inspections. It is about being alert to each new development that would add to the safety of the public. It is about studying and memorizing the standards so that we can make fair and impartial judgments. It is about forty members each spending hundreds of hours serving on code making panels, reading code proposals and drafting responses to those proposals. It is about individual members investing valuable personal time in teaching, planning meetings, answering questions, and helping each other succeed.

For over 83 years, IAEI has quietly done its job. Because of the diligence of thousands of trained electrical inspectors, the world is a safer place and electricity is somewhat tamed.

ABOUT THE

CERTIFICATION PROGRAM

The need for an IAEE Certification Program was identified by local entities, state agencies, and national organizations. Their recommendation was that IAEE develop state of the art certification programs based on knowledge and the practical application of the *National Electrical Code*® (*NEC*).

In response to these industry needs, IAEE has undertaken the responsibility for designing valid and reliable Residential and Master Electrical Inspector Certification Programs and ensuring these programs are accessible to all electrical inspectors.

The benefits of the program include the following:

- Certification by one of the most recognized international organizations in the electrical inspector industry
- Listing in the IAEE certified electrical inspector registry
- Compelling evidence demonstrating your professional accomplishment
- Name published in *IAEE News*
- Expertise recognized across the country
- Lapel pin, certificate, and wallet card

Benefits to the organization you work with:

- Ability to incorporate a nationally recognized system into the inspector qualification process
- Quality control through professional credentials
- Improved electrical safety, potentially reducing liability
- Reduced expenditures on maintaining or developing *local* certification programs
- Opportunity to recognize the professional accomplishments of staff or vendors
- Productivity improvements through increased efficiency

It is the mission of IAEE's certification program to promote professionalism within the electrical inspector field-of-practice through a widely accepted, recognized, respected and practical Certified Electrical Inspector Program.

The goals of this certification program are to:

- Promote electrical safety
- Enhance professionalism within the electrical inspector community
- Ensure a uniform, fair process for certification that is accessible to everyone
- Ensure proficiency in the use of codes and standards
- Facilitate success for those seeking certification
- Implement a program designed for use by regulatory bodies
- Promote professional development through continuous learning
- Recognize and provide evidence of competence as related to the *National Electrical Code*, *NFPA Electrical Inspection Manual*, and the current edition of the *UL Guide Information for Electrical Equipment* (White Book)

Testing agency

Prov and ExamRoom.AI services are the professional testing agencies under contract with IAEE to assist in the development, administration, scoring and analysis of its Certified Electrical Inspector-Residential and Master Programs.

Statement of Nondiscrimination

IAEE, Prov, and ExamRoom.AI do not discriminate among candidates on the basis of age, gender, race, color, religion, national origin, disability or marital status.

Eligibility Requirements for the Electrical Inspector Certification Programs

Residential Electrical Inspector

High School Diploma or GED plus:

- Completion of registered electrical apprenticeship training program, **or**
- Associate degree in electrical construction technology (or equivalent), **or**
- Journeyman electrician (or equivalent) or master electrician, **or**
- BS in electrical engineering or PE in electrical engineering, **or**
- 4,000 hours as an electrician, **or**
- 2,000 hours as an electrical inspector

Master Electrical Inspector

The program eligibility requirements are the same as Residential Inspector Program with exception of the following changes:

- 8,000 hours as an electrician, **or**
- 4,000 hours as an electrical inspector

Note: It is recommended that the applicant already be employed as an electrical inspector in order to complete the Practicum Phase (see page 17).

Examination Administration

Examinations are delivered via computer. You have the option to choose a Prov contracted testing center from a list comprising of approximately 250 locations throughout the United States. If there is not a testing center available in your area or you prefer to test remotely, we offer remote online proctoring of the exam via ExamRoom.AI.

- **Prov Testing Center:** Exams are administered by appointment only Monday–Friday. Some locations may offer Saturday testing based on availability. Available dates will be indicated when scheduling your examination. Appointment times vary based on location and availability. Candidates are scheduled on a first-

come, first-served basis. Examinations are not offered on major holidays. Please check with the call center agent or online for availability.

- **ExamRoom.AI:** Exams are administered by appointment only 24/7. Available dates will be indicated when scheduling your examination. Appointment times vary based on availability of preferred day and time. Examinations will not be administered on:

New Year's Day
Memorial Day
Independence Day
Labor Day

Thanksgiving Day
Friday after Thanksgiving
Christmas Eve
Christmas Day

Application Fees

Candidates must submit the appropriate fee with the complete examination application. Payment may be made by credit card (Visa, MasterCard, American Express, Diners Club, or Discover), cashier's check, money order, or personal check made payable to IAEL.

CEI – Residential Application Fee – \$275; \$325 non-member
CEI – Master Application Fee – \$275; \$325 non-member
CEI – Master and Residential Application Fee – \$550; \$650 non-member

Annual Program Fee

Certificate holders are assessed an annual program fee of \$60 (members) or \$85 (non-members), which includes the recertification process. Certificate holders are notified annually by mail when their annual program fee is due.

The Application Process

The candidate completes and submits a paper application and appropriate fee when the eligibility requirements are

satisfied. IA EI reserves the right to verify information supplied by or on behalf of a candidate. Any misrepresentation of information shall be considered grounds for prohibition from testing or revocation of certification. An application is considered complete only if all information requested is complete, legible and accurate; if the candidate is eligible for the examination; and if the appropriate fee accompanies the application.

Applications that are incomplete will be returned, with any fee submitted, minus a \$50 processing fee.

Once the application is processed, a letter of authorization to take the examination is sent to the candidate within four weeks. The letter of authorization to take the examination is valid for 90 days. A candidate who fails to schedule an appointment for examination within the 90-day period forfeits the application and all fees paid to take the examination. A complete application and examination fee are required to reapply for the examination.

To Schedule an Examination

After eligibility requirements are approved by IA EI and you have received written confirmation from IA EI, there are two ways to schedule an appointment for the Certified Electrical Inspector Examinations.

Site proctored and remote online proctored exams must be scheduled 72 hours in advance of preferred day and time for the examination.

- **Scheduling Online:** You may schedule online 24/7 via the link in your Approval Letter or by visiting <http://www.provexam.com/schedule>.
 - You will enter your Candidate ID (provided in your Approval Letter), and Last Name.
 - On the welcome screen, you will then select “Find Suitable Time and Venue.”
 - You will then be presented with a list of all possible testing sites. At the top of the list of

sites is the ExamRoom virtual site, followed by all of the in-person testing sites.

- You will choose the site where you want to test by selecting the Scheduled Link underneath each site. You will then select the date/time when you wish to take the test.
 - Follow the on-screen prompts to confirm the scheduling process.
 - You will receive an email confirming the test appointment.
- **Scheduling by Phone:** Please call Prov/ExamRoom.AI at (866) 720-PROV (7768) or (386) 518-6889 to schedule an examination via phone. Call center agents are available Monday – Friday, 8:00 a.m. to 5:00 p.m. (Eastern Time). You will be asked to provide your name, best method of contact, Candidate ID and address to locate the nearest testing center or to schedule for remote online proctoring. If a testing center is not available in your area, you will be scheduled to take your examination via ExamRoom.AI.

Test Center Locations

Prov contracted testing centers will display when entering your location into the scheduler site. For a complete list of Prov contracted testing facilities, please contact us at info@provnow.com or by phone at (866) 720-PROV (7768) or (386) 518-6889.

Special Accommodations for Candidates with Disabilities

IA EI, Prov, and ExamRoom.AI comply with the Americans with Disabilities Act and strive to ensure that no individual with a disability is deprived of the opportunity to take the examination solely by reason of that disability. Prov and ExamRoom.AI will provide reasonable accommodations for candidates with disabilities.

Wheelchair access is available at all established test

centers. Candidates with visual, sensory or physical disabilities that would prevent them from taking the examination under standard conditions may request special accommodations and arrangements. To request special accommodations, complete the REQUEST FOR SPECIAL EXAMINATION ACCOMMODATIONS form included in this handbook and submit it with your application and fee at least 45 business days prior to your desired testing date. Please inform Prov or ExamRoom.AI of your need for special accommodations when scheduling your examination.

Examination Appointment Changes

You may reschedule an examination appointment, at no charge, by calling Prov or ExamRoom.AI at (866) 720-PROV (7768) or (386) 518-6889 at least 48-hours prior to the scheduled day and time. Failure to do so will result in forfeiting your application fee.

Candidates will also forfeit their application fee for failure to report for their scheduled day and time (“no show”). Candidates who are more than 30 minutes late for their exam will be considered a “no show” unless they have contacted the testing center or ExamRoom.AI to make arrangements.

Retake Examination

You are allowed an additional 45 days from the date you are notified by IAIE of your examination results if you need to retake the exam. The retake fee is \$125 (members) or \$150 (non-members).

Examination Content

Residential. The three-hour, open-book, 90 scored items CEI-R computer-based examination is designed to evaluate the applicant’s electrical inspection principles, knowledge, and code application skills at the level of Residential Electrical Inspector (as defined in the NFPA *Electrical Inspection Manual*).

Master. The four-hour, open-book, 120 scored questions CEI-M computer-based examination is designed to evaluate

the applicant’s electrical inspection principles, knowledge, and code application skills at the level of Master Electrical Inspector (as defined in the NFPA *Electrical Inspection Manual*).

Each item on the examinations is categorized by a cognitive level that a candidate would likely use to respond. These categories are:

1. **Recall:** The ability to recall or recognize specific information is required.
2. **Application:** The ability to comprehend, relate or apply knowledge to new or changing situations is required.
3. **Analysis:** The ability to analyze and synthesize information, determine solutions and/or to evaluate the usefulness of a solution is required.

Find the detailed content outline chart on the following page

Certified Electrical Inspector Detailed Content Outline

RE = Recall AP = Application AN = Analysis	Master				Residential			
	RE	AP	AN	TOTAL	RE	AP	AN	TOTAL
I. General Requirements	6	8	0	14	4	6	0	10
A. General Requirements	6	8	0	14	4	6	0	10
II. Wiring Methods Checklists	6	8	0	14	4	6	0	10
A. General Wiring Methods	2	1	0	3	1	2	0	3
B. Boxes and Conduit Bodies	2	2	0	4	1	2	0	3
C. Cabinets and Cutout Boxes	1	2	0	3	1	0	0	1
D. Switches and Receptacles	1	3	0	4	1	2	0	3
III. Services, Feeders, and Branch-Circuits	3	7	3	13	2	3	3	8
A. Services	1	3	0	4	1	1	1	3
B. Feeders	1	1	3	5	0	1	0	1
C. Branch Circuits	1	3	0	4	1	1	2	4
IV. Grounding and Bonding	4	7	2	13	2	6	1	9
A. Service Grounding and Bonding	2	3	1	6	1	3	0	4
B. Equipment Grounding and Bonding	2	4	1	7	1	3	1	5
V. Dwelling Units	2	6	2	10	10	16	5	31
A. Residential Rough Inspections	1	3	0	4	6	7	0	13
B. Residential Service, Feeders, and Grounding Inspections	0	1	1	2	1	2	3	6
C. Residential Finish Inspections	1	2	1	4	3	7	2	12
VI. Commercial and Industrial	3	5	4	12	0	2	1	3
A. Motors	0	1	2	3	0	1	0	1
B. Air-conditioning and Refrigerating Equipment	0	1	1	2	0	1	1	2
C. Transformers	1	1	1	3	0	0	0	0
D. Phase Converters	0	1	0	1	0	0	0	0
E. Capacitors	0	1	0	1	0	0	0	0
F. Storage Batteries	1	0	0	1	0	0	0	0
G. Equipment Over 1000 Volts, Nominal	1	0	0	1	0	0	0	0

Table I. Detailed content outline

Table 3. Detailed content outline continued

RE = Recall AP = Application AN = Analysis	Master				Residential			
	RE	AP	AN	TOTAL	RE	AP	AN	TOTAL
VII. Hazardous Locations	1	4	3	8	0	0	0	0
A. Class I, Class 2, and Class 3 Locations	0	1	2	3	0	0	0	0
B. Commercial Garages, Aircraft Hangers, Gasoline Dispensing and Service Stations, Bulk Storage Plants, Spray Applications, Dipping, and Coating Processes	1	3	1	5	0	0	0	0
VIII. Special Occupancies, Equipment, and Conditions	3	12	4	19	2	4	0	6
A. Special Occupancies	2	7	2	11	1	2	0	3
B. Special Equipment	1	4	2	7	0	1	0	1
C. Solar Photovoltaic Systems and Interconnected Electric Power Production Sources	0	1	0	1	1	1	0	2
IX. Swimming Pools and Related Installations	2	2	0	4	3	4	0	7
A. Permanently Installed Swimming Pools	1	1	0	2	2	3	0	5
B. Related Installations	1	1	0	2	1	1	0	2
X. Emergency and Standby Systems	2	2	1	5	1	1	0	2
A. Fire Pumps	1	0	0	1				
B. Emergency, Legally Required and Optional Standby Systems	1	2	1	4	1	1	0	2
XI. Signaling and Communication Circuits	4	4	0	8	4	0	0	4
A. Class 1, Class 2, Class 3, Remote Control, Signaling, and Power-Limited Circuits	1	1	0	2	1	0	0	1
B. Fire Alarm Systems	1	1	0	2	1	0	0	1
C. Optical Fiber Cables, Raceways, and Communication Systems	1	1	0	2	1	0	0	1
D. Community Antenna Television, Radio Distribution, and Network-Powered Broadband Communication Systems	1	1	0	2	1	0	0	1
Totals	36	65	19	120	32	48	10	90

PREPARING FOR THE EXAM

Electrical inspector certification program study guides — Electrical General, One- and Two-Family, and Plan Review — are available for purchase from IAEL.

The references needed to prepare for the examination are:

1. NFPA Electrical Inspection Manual with Checklists.
2. National Electrical Code (NFPA 70).

Your primary objective in preparing for the examination is to pass. Other objectives such as learning new material and reviewing old material are critical toward this objective. Begin your study by developing your strategy for success.

A good study strategy includes preparation. To prepare, determine first what you need to learn, choose your study materials, and select a quiet, comfortable place that allows you to focus. Before you begin, check to make sure you have everything you need. Try to avoid interruptions for any reason.

Developing a study plan will allow you to learn the most as you study. Include setting goals in your study plan. Review what you have studied as often as possible. The more you review, the more you will retain.

When you begin studying, learn the layout of the standards that will be used as reference material during the examination. While it is not necessary to memorize the specific requirements contained in the codes and standards, it is important to know what information is covered by the documents and how to quickly locate information in them. Look for tables that summarize requirements, these could save you valuable time during the written examination.

Once you have access to, or have obtained, all the resource materials necessary for study, you should focus on learning the layout of your resource materials. Each *NEC* document is divided into similar parts, beginning with administration and definitions, followed by the specific requirements in the code. The better you understand the

layout of the resources, the easier it will be to find answers to questions during the examination.

Develop an understanding of the general content of each resource. With an understanding of the resource, it will be easier to determine the applicable document for answers to questions during the written examination.

The better you understand the layout, and general content of each resource, the quicker you will be able to find information. It is extremely important that you pace yourself during the written examination. This is one reason why review of materials is so important.

SAMPLE EXAMINATION QUESTIONS

Following are sample residential and master inspector questions in the same style and similar content as will be on your examination. Use the sample questions to verify your understanding of the topics in the examination. Answers are provided in table 4.

RESIDENTIAL SAMPLE QUESTIONS

1. The interrupting rating of a circuit breaker is marked in which of the following?
 - A. Volts
 - B. Watts
 - C. Volt-amperes
 - D. Amperes
2. Which of the following is true about a surface-mounted cabinet that is installed in a wet location?
 - A. There shall be at least a 3 mm (1/8 in.) air-space between the cabinet and the wall on which it is mounted.
 - B. Nonmetallic enclosures shall be permitted to be installed without an air space on a nonmetallic wall.
 - C. A metallic cutout box shall be insulated against accidental contact.
 - D. Both metallic and nonmetallic enclosures shall be weatherproof.
3. Which of the following wiring methods is NOT per-

mitted for use as the wiring method for a service?

- A. liquidtight flexible metal conduit 2.5 m (8 ft) long
- B. rigid nonmetallic conduit 3.0 m (10 ft) long
- C. a wireway 3.0 m (10 ft) long
- D. a busway 7.5 m (25 ft) long

4. An effectively grounded metal water pipe is used as the grounding electrode for a single family dwelling. What is the minimum size supply-side bonding jumper around insulated joints at a water softener if the service-entrance conductors are sized at 4/0 AWG copper?

- A. 4 AWG copper
- B. 2 AWG copper
- C. 1/0 AWG copper
- D. 2/0 AWG copper

5. A kitchen island counter space 550 mm (22 in.) by 450 mm (18 in.) requires how many receptacle outlets?

- A. 0
- B. 1
- C. one at each end
- D. one at each side

6. For a Class 1 circuit, what is the maximum rating permitted for overcurrent protection for a 16 AWG conductor?

- A. 18 amperes
- B. 14 amperes
- C. 12 amperes
- D. 10 amperes

7. For a 125-volt, 15-ampere duplex receptacle, the electrical terminals are often distinguishable by different colored connection terminals. Which conductor must be connected to the white or silver colored receptacle terminal?

- A. grounding conductor
- B. grounded conductor
- C. ungrounded conductor
- D. equipment grounding conductor

8. The storage batteries of a solar photovoltaic system for a dwelling have live parts that are accessible. The cells of the batteries shall be connected so as to operate at a voltage of?

- A. 25 volts, nominal, or less.

- B. 30 volts, nominal, or less.
- C. 40 volts, nominal, or less.
- D. 50 volts, nominal, or less.

9. A fountain that has water common to a pool shall comply with all the provisions for

- A. permanently installed swimming pools.
- B. pools.
- C. fountains only if no lighting is installed in the fountain.
- D. fountains only if no lighting is installed in the pool.

10. A transfer switch for an optional standby power system in a dwelling unit shall be

- A. identified for standby use.
- B. suitable for the intended use.
- C. electrically operated and mechanically held.
- D. rated for continuous use.

Master Sample Questions

1. A water pipe is installed 2.0 m (6 ft 6 in.) over the top of a switchboard. This installation is permitted

- A. if protection from leaks is provided for the switchboard.
- B. if the pipe is continuous and has no fittings above switchgear.
- C. only by special permission of the AHJ.
- D. only in existing installations.

2. Conductors are feeding through a fusible safety switch enclosure that has adequate space for this provided purpose. Assuming there are no splices on taps, what is the maximum fill at any cross section for a 75 mm (3 in.) x 100 mm (4 in.) wiring space within the enclosures?

- A. 4.8 square inches
- B. 6.0 square inches
- C. 7.2 square inches
- D. 9.0 square inches

3. A service is installed where equipment ground fault

protection is required. Which of the following is true about testing of the system?

- A. Testing is not required.
- B. Testing is not required if installed by qualified persons.
- C. Testing is required within 30 days of operation.
- D. Testing is required before putting it into operation.

4. A 1000-ampere service is supplied with (3), 400 kcmil copper THWN conductors per phase. The metal water piping system for the building is not effectively grounded. What is the minimum size copper bonding conductor required for bonding the metal water piping system?

- A. 1/0 AWG
- B. 2/0 AWG
- C. 3/0 AWG
- D. 400 kcmil

5. Overhead service conductors must have certain clearances from windows, decks, porches, etc. Which of the following statements are true?

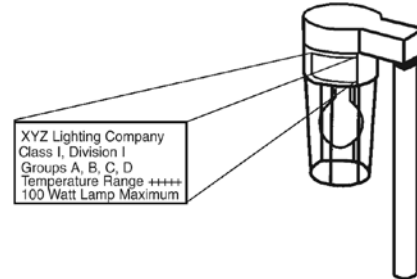
- A. The point of attachment can be mounted within 900 mm (3 ft) of the side of a window, which is screwed shut with tamper proof screws.
- B. A through-the-roof mast can be mounted within 750 mm (2 1/2 ft) of the edge of a deck, provided the drip loop is 1.8 m (6 ft) or more above the deck surface.
- C. The point of attachment can be located within 900 mm (3 ft) of a ladder, if the ladder incorporates safety brackets.
- D. A point of attachment located 1.2 m (4 ft) horizontally from a second floor deck can be mounted 2.5 m (8 ft) vertically above the deck.

6. What is the minimum ampacity required for feeder conductors supplying (2)-10 hp, (2)-15 hp and (4)-30 hp three-phase, 460-volt squirrel cage motors?

- A. 230 amperes
- B. 240 amperes
- C. 276 amperes

D. 280 amperes

7. If the auto ignition temperature of acetylene is 305° C, what is the maximum temperature (Identification Number) rating allowed for this fixture and to what ambient temperature is this referenced?



- A. T1 and 30°C
- B. T2 and 30°C
- C. T1 and 40°C
- D. T2 and 40°C

8. Which of the following is an example of an assembly occupancy?

- A. shopping mall
- B. auditorium
- C. machine shop
- D. hospital

9. A 480-volt, 3-phase, 4-wire wye service consists of two 3000-amp disconnecting means. An interactive system is operating in parallel with this service. Where is the output of the interactive system required to be connected?

- A. to the load side of the service equipment
- B. to the supply side of the service equipment ground fault protection
- C. to the underground conductors of the service
- D. to the ground fault system

10. Which of the following wiring methods is permitted for the control circuit wiring for a fire pump?

- A. liquidtight flexible metal conduit
- B. type NM cable
- C. electrical metallic tubing
- D. rigid nonmetallic conduit

Sample Questions – Answer Key

Please use this answer key to evaluate your responses. Mark on this answer key those questions you answered incorrectly and review those documents to find the correct answer when preparing for the examination.

Residential sample question answers

√ for

Incorrect Responses	Question Number	Answer	NEC Reference
_____	1	D	240.83(C)
_____	2	D	312.2
_____	3	A	230.43
_____	4	B	250.102(C)(1), Table 250.102(C)(1)
_____	5	A	210.52(C)(2)
_____	6	D	725.43
_____	7	B	200.10(B)
_____	8	D	690.71(B)(1)
_____	9	A	680.50 & Article 680, Part II
_____	10	B	702.5

Master sample question answers

√ for

Incorrect Responses	Question Number	Answer	NEC Reference
_____	1	A	110.26(E)(1)(a) & (b)
_____	2	A	312.8, 404.3(B)
_____	3	D	230.95, 230.95(C)
_____	4	C	250.104(A)(1), Table 250.66
_____	5	D	230.9, 230.24
_____	6	B	430.24, Table 430.250
_____	7	B	500.8(B), 505.9(D)(1)
_____	8	B	518.2(A)
_____	9	B	705.32
_____	10	A	695.14(E)

Table 4. Answers to sample questions

TAKING THE EXAMINATION

The CEI-R and CEI-M examinations are open-book, 3- and 4-hour, 90- and 120-multiple-choice questions for each examination, respectively. Only the reference documents National Electrical Code (NFPA 70) and NFPA Electrical Inspection Manual may be used during the examination.

It is highly recommended that applicants practice for the examination using the sample examination questions included in this handbook or the IAEI Study Guides, which are available from IAEI. Candidates should become familiar with each of the referenced documents' content and organization.

During the examination, applicants will be expected to interpret and apply code-related material in response to the examination questions. Applicants will need access to each of the referenced publications during the examination. It is the applicant's responsibility to bring those materials that are needed to complete the examination to the test site.

ON THE DAY OF YOUR EXAM

Prov Site: Report to the testing center no later than 15 minutes prior to your scheduled testing time.

To gain admission to the testing center, you need to present a valid Government-issued ID with a current photograph. Your ID must be current and include your current name and signature. You will also be required to sign a login book for verification of identity.

Acceptable forms of ID include a valid passport, driver's license, State identification card, or military ID.

The proctor will have candidates sign a login book and take a photo. The proctor will then take the candidate to their assigned computer and will instruct them on the login process for exam access.

ExamRoom.AI (Remote): Log in to your candidate account no later than 5 minutes before your scheduled exam. Your Username is your email and the Password is your Candidate ID that is provided in your Eligibility Letter and your ExamRoom Confirmation email. You will run your first System Check to make sure your computer is in working order.

Click "Begin Exam" and you will be asked to perform a second System Check. Once complete, you will be directed to a live On-Boarding Agent (OBA). The OBA will guide you through the process of accessing your exam. Please have your Government-issued ID ready.

TIMED EXAMINATION

When you log into the exam, there is an option to click on the "Walk Through Link." This demo presentation will NOT be part of the examination time. Once you are ready to test, click "Start Exam" and you will be directed to the first question.

On the top of the screen, you will see your clock and time remaining. This clock is visible throughout the exam. If you exceed the allotted time (3 hours for CEI-R and 4 hours for CEI-M), your exam will end automatically, and your answers will be submitted.

Only one question will be presented at a time. You can choose the number of your correct answer by clicking 1, 2, 3, 4, etc., on your keyboard or click the correct answer with your mouse. If at any time you wish to go back to change an answer, you may use your mouse or the arrow keys on your keyboard. There is also the option to click the "Summary" icon on the right-hand side of your screen to see all your Answered, Unanswered, and Flagged questions. You can go back at any time during the course of the exam to change your answers.

To navigate through the exam questions, you can use the left (<) and the right (>) arrow keys on your keyboard or use your mouse to click the arrow icons on the right-hand side of your screen. To navigate quickly through your exam, you can hold down the arrow key of your keyboard or use your mouse to click on hold the arrow key on your screen.

Test items (answered or unanswered) can be flagged for further review by clicking the “Flag” icon on the right-hand side of your screen. Your flagged questions are available by clicking on the “Summary” icon.

During the exam, you may leave a comment for any item by clicking on the “Comment” icon on the right-hand side of your screen. A dialogue box will pop up for you to leave your comment or concern. Comments will be reviewed after the exam is completed. Individual responses will not be provided.

When you are finished with your exam, please click “End Test.”

INCLEMENT WEATHER, POWER FAILURE, OR EMERGENCY

Prov Site: In the event of inclement weather, prior to your scheduled exam, please check the website of your chosen location for any notices or call Prov at (866) 720-PROV or (386) 518-6889. If the center is open, the exam will NOT be rescheduled. If power to the testing center is temporarily interrupted during the exam, your exam will restart, and all previous answers will be saved.

ExamRoom: If there is a power failure during your exam, you will log back in to ExamRoom and the OBA will direct you to your exam. If the Internet connection is unstable, you will be asked to reschedule your exam. During your exam, there are IT personnel ready to aid with any technical difficulties that you may have.

Prov or ExamRoom will determine if any unforeseen emergencies will result in a cancellation without penalty of rescheduling.

RULES FOR EXAMINATION

1. Report to your designated test center no later than 15 minutes prior to your scheduled time. For ExamRoom remote proctoring, be prepared to login 5 minutes before your scheduled time. If proctoring through ExamRoom.AI, you must be in a quiet room with no other individuals around.

2. No books, papers, dictionaries, unapproved reference materials, electronic devices, or personal items may be taken into the testing center. If using ExamRoom, the OBA will ask to scan your room. All prohibited materials and items must be removed from your testing area.

Testing sites provide locations to leave your personal belongings. IAEEI and Prov are not responsible for any lost, damaged, or stolen items. It is recommended that you leave such items in your car or home.

If you are caught with prohibited materials, devices, or items, your exam will be cancelled, and you will be asked to leave, or the proctor will terminate your exam. You will forfeit your testing fees.

3. Pencils will be provided at the testing site. If proctoring remotely with ExamRoom, you will only be allowed pencils on your desk, no pens, highlighters, markers, etc.

4. Scratch paper will be provided at your testing site, which must be returned to the proctor upon completion of your exam. If proctoring remotely, the OBA will ask to confirm the paper is blank. Upon completion of your exam, the proctor will ask you to show your paper on the camera and then destroy the paper. All computer screens, questions, paper, and written materials are the property of IAEEI, Prov and ExamRoom.AI and may not be reproduced in any form.

5. No questions concerning the content of the examination may be asked during the examination.

6. Eating, drinking or smoking will not be permitted in the test center or while being remotely proctored.

7. You may take one, five-minute, bathroom break for the CEI-R exam and two, five-minute bathroom breaks for the CEI-M. You will not be allowed additional time. You must notify the proctor of your break and make sure they confirm your break.

8. The supervisor or proctor may dismiss a candidate from the examination for any of the following reasons, including, but not limited to:

- Unauthorized entry into a testing location;
- The candidate creates a disturbance, is abusive or otherwise uncooperative;
- The candidate gives or receives help, or is suspected of doing so during the examination;
- The Candidate attempts to record, screenshot, or take notes of examination;
- The candidate attempts to take the examination for someone else;
- The candidate is observed with unauthorized notes, books, or other aids.

9. Only a silent, non-programmable calculator without alpha keys or printing capabilities is allowed in the testing room/area. On the right-hand side of the exam, there is a calculator icon available if you do not have an approved calculator on hand.

10. No cameras, notes, tape recorders, pagers, additional laptops or monitors, tablets, or smart phones are allowed in the testing site or remote testing location. Additional electronic devices are strictly prohibited and will result in the termination of your exam and forfeit of fees.

FAILING TO REPORT FOR AN EXAMINATION

A candidate who fails to report for their scheduled examination forfeits the application and all fees paid to take

the examination. A completed application and examination fee are required to reapply.

FOLLOWING THE EXAM

After completing the examination, candidates are asked to rate their ExamRoom experience, and in some sites may be asked to complete a short evaluation.

Prov Contracted Site: Candidates are asked to see the proctor or supervisor to receive a printout of their score report.

ExamRoom: Candidates will receive an email promptly after the exam indicating their score result.

Your score result will indicate a “pass” or “fail.” Score reports will not be delivered via phone or facsimile. The method used to set the minimum passing score is based on psychometric data for the examination. These ratings are averaged to determine the minimum passing score.

IF YOU PASS THE EXAMINATION

Once the examination is successfully completed, in 4–6 weeks you will receive a Practicum Phase Workbook that includes:

- Detailed instructions
- Performance checklist
- Submission guidelines
- Verification forms for submittal

IF YOU DO NOT PASS THE EXAMINATION

Upon notification from IAEI, those who do not pass the examination must schedule to retake the examination within 45 days. Please follow the procedure included with the “did not pass notice,” from IAEI and submit the required application and retake fee of \$125 (members) or \$150 (nonmembers).

If a passing score is not achieved after the second attempt, the applicant must reapply to the program by sub-

mitting the full application fee and application. Applications cannot be updated.

SCORES CANCELED BY THE IAEI OR PROV

IAEI, Prov, and ExamRoom.AI are responsible for the integrity of the scores they report. On occasion, occurrences, such as computer malfunction or misconduct by a candidate, may cause a score to be suspect. IAEI, Prov, and ExamRoom.AI are committed to rectifying such discrepancies as expeditiously as possible. IAEI may void examination results if, upon investigation, violation of its regulations is discovered.

CONFIDENTIALITY

Information about candidates for testing and their examination results are considered confidential. Studies and reports concerning candidates will contain no information identifiable with any candidate, unless authorized by the candidate.

DUPLICATE SCORE REPORT

Candidates may purchase additional copies of their score reports at a cost of \$25 per copy. Requests must be submitted to IAEI, in writing, within 12 months after the examination. The request must include the candidate's name, Social Security number, mailing address, telephone number, date of examination and examination taken. Submit this information with the required fee payable to IAEI. Duplicate score reports will be mailed within approximately two weeks after receipt of the request and fee.

PRACTICUM PHASE

The following is an overview of the Practicum Phase. Details are shown in the residential and master electrical inspector Practicum Phase Workbooks, which are provided to certificate candidates upon the successful completion of the examination.

The Practicum Phase is designed to ensure that an individual demonstrates experience in the particular field prior to becoming certified. This phase not only ensures that you have relevant job experience, but also provides additional learning opportunities.

After passing the examination, applicants have 270 days maximum to complete the field practicum portion of the program, and submit Practicum Phase materials.

PRACTICUM FOR RESIDENTIAL ELECTRICAL INSPECTOR

Twenty (20) dwelling inspections must be conducted and reported. The applicant completes check-off items on the performance checklist, and then must have each verification form signed by a person witnessing the inspection process. Additionally, a Witness Evaluation Form is required, indicating applicant pass/fail for at least five of the following inspections, one of which must be a swimming pool.

- A total of twenty (20) residential dwellings must be inspected.
- Ten (10) may be rehabs.
- At least five (5) must include service inspections.
- At least two (2) swimming pool inspections—one (1) must be witnessed. The Swimming Pool Case Study may be substituted for this requirement.

Practicum for Master Electrical Inspector

Thirty (30) inspections must be conducted and reported. The applicant completes the check-off items on the per-

formance checklist, and then must have a verification form signed by a witness for each inspection. Additionally, a Witness Evaluation Form is required, indicating applicant pass/fail for at least eight inspections.

Thirty (30) inspections must include the following:

Notice: a witness (can be a supervisor, co-worker, or inspector) must supervise eight of the following inspections.

- At least five (5) one and two family dwellings. Five (5) must be witnessed inspections.
- At least one (1) must be a multi-family dwelling. One (1) must be witnessed.
- At least five (5) must be commercial or industrial inspections. One (1) must be witnessed.
- At least five (5) must include service inspections. One (1) must be witnessed.

There may be circumstances where the type of construction within a jurisdiction limits the individual's ability to perform the required number of inspections in the specified categories. In those cases an inspection or inspections at any of the types of facilities identified below can be used for the purposes of accumulating the requisite total of 30 inspections. All inspections performed using the Optional Inspection provision are required to be witnessed.

Example:

At least:

4 one- and two-family dwellings

—All witnessed inspections

1 Manufactured home (or one other optional inspection)

—Witnessed

5

1 multi-family dwelling — witnessed

5 commercial or industrial—One (1) witnessed

5 service inspections—One (1) witnessed

Plus

14 inspections in any of the above

30 inspections—8 witnessed

Optional Inspections for Master Electrical Inspector

- Agricultural
- Marina
- Industrial
- Manufactured home

The evaluation parameters for Residential and Master Electrical Inspector are based on the standards and practices identified in:

- NFPA Electrical Inspection Manual with Checklists (Based on NFPA 70)
- National Electrical Code (NFPA 70)
- UL Guide Information for Electrical Equipment, current edition (White Book)

After the Practicum Phase requirements have been fulfilled, the information is sent to the IAEEI Certification Department for final validation.

If all is in order, and other certification program requirements are met, you will then receive your official certification by mail from IAEEI.

You will receive a letter, certificate, wallet card, and pin acknowledging your credential.

PRE-QUALIFICATION

Individuals not employed as electrical inspectors or do not have access to do the field inspections (Practicum Phase) can become Pre-Qualified. This is not certification. Pre-qualification provides the opportunity to take the examination and, if successful, obtain a Pre-Qualification letter. This letter may be acceptable to an inspection department to hire the candidate subject to completing the practicum phase and becoming a Certified

Electrical Inspector. The 270 days allowed to complete the practicum phase would begin when IAEI is notified of employment. The pre-qualification letter expires three years from the date of the letter and the process would begin anew with a new application and fee required.

TRANSFERS

Transfers from Other Related Certification Programs Consideration for Acceptance

Transfer applicants from other related electrical inspector certification programs are considered for acceptance into the IAEI Certification Program for Residential Inspectors and Master Electrical Inspectors.

In addition to the program eligibility requirements shown on page 5, transfer applicants must provide proof of an active certification in a related program.

Transfer participants from other related certification programs to the IAEI Certification Program for Residential and Master Electrical Inspectors are required to complete the IAEI Electrical Inspectors Certification Program Practicum Phase requirements and one of the following:

1. Complete 8 hours of an IAEI training program
OR
2. Complete recertification requirements

Transfer Fee

The transfer fee is \$275.00 member | \$325 non-member.

Note: An additional fee is required for the IAEI training program.

Transfer participants successfully certified in the IAEI Electrical Inspector Certification Program are subject to all program requirements.

APPEALS

Candidates for the IAEI Residential Electrical Inspector or the Master Electrical Inspector Certification programs who believe they were unjustly denied eligibility for examination, certification or for recertification, allege inappropriate administration procedures, severe environmental testing conditions, or for other reason challenge results of an examination have the right to appeal. All such appeals must be filed in the office set out below within the earlier of 30 days of the examination or notice of non-certification or recertification. The fee for appeal is \$100. The fee will be refunded to the candidate if the Appeals Committee resolves the appeal in favor of the candidate.

Each appeal should include a written statement of no more than five typed pages setting out the basis of the appeal, including information as specific as the candidate feels necessary why he or she is entitled to the relief requested. The Appeals Committee will consider each such written statement. The Appeals Committee is entitled to seek further information from the applicant or any other person, organization or office that it feels appropriate and review any materials that it feels appropriate to determine the appeal. The Appeals Committee will determine the appeal and respond to the candidate. Appeals will be resolved within 90 days of submission. The Appeals Committee reserves the right to waive or extend any time period set out in the procedure, or modify any process as it deems appropriate to properly determine any appeal. All steps of the appeal process will take place in writing unless otherwise determined by the Appeals Committee.

All appeals along with the \$100 fee should be sent to:

IAEI Certification Department
IAEI
P. O. Box 830848
Richardson, TX 75083-0848

CEI RECERTIFICATION

Once you have been certified as a Residential or Master Electrical Inspector, recertification every three (3) years is mandatory. It is important that you begin accumulating the required points as soon as possible. You are required to track and maintain your recertification points and documentation. You will be notified when to submit your documentation.

All recertification activities must be clearly related to the electrical inspector field of practice.

If college courses are declared for training hours, the same course cannot be taken twice within the three-year period and credit hours must be converted to actual contact hours.

IAEI Recertification Chart

In order to maintain currency and relevancy in the Electrical Inspector field of practice, certificate holders are required to submit a minimum of sixty (60) points of documented professional development for recertification. The 60 points must be submitted during the 3-year recertification cycle and must be related to the specified electrical inspector classification.

PROFESSIONAL DEVELOPMENT CATEGORY	POINT ALLOTMENT	MINIMUM POINTS	MAXIMUM POINTS	REQUIRED DOCUMENTATION
Professional Practice of Certificate Holder	1 pt. per inspection or plan review	0	30	Letter from employer/supervisor*
IAEI Membership of Certificate Holder	1 pt. per association membership per year	0	6	Copy of membership during recertification period
Instructing or Lecturing by Certificate Holder	2 pts. per contact hour	0	48	Letter from employer
Publication by Certificate Holder	5 pts. per article	0	10	Copy of article
	10 pts. per book	0	20	Copy of title page identifying author

A MINIMUM OF 12 POINTS IS REQUIRED IN THE FOLLOWING CATEGORY

Training received by Certificate Holder	1 pt. per contact hour 1 CEU = 10 contact hours	12	60	Certificate copy, letter from presenter, or description of training with letter from supervisor
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*DOCUMENTATION

Reasonable proof of attendance/participation in the described categories will be accepted. Reasonable includes copies of agendas, rosters, or other descriptive program materials which have been signed and dated by the presenter/sponsor indicating the certificate holder's attendance. The certificate holder is required to sign these descriptive materials as an attestation of their attendance.

IAEI Electrical Inspector Certification Program

Application and Examination Registration Form

Note: Retest complete form only through payment information.

 Last Name First Name Middle Date

 Mailing Address (Street or P.O. Box)

 City State ZIP/Postal code

() () ()

 Daytime Phone Number Evening Phone Number Fax number

 E-mail Address

Birthdate _____ Social Security # _____
 month day year

IAEI Membership # _____

Other: Organization _____ Membership # _____

EXAMINATION / TRANSFER / RETEST APPLICATION (PLEASE CHECK)

NEW Master & Residential Examination
 \$275 (member) / \$325 (non-member)

TRANSFER Master & Residential
 \$275 (member) / \$325 (non-member)

RETEST Master & Residential Examination
 \$125 (member) / \$150 (non-member)

Master

Transfer Master

Retest Master

Residential

Transfer Residential

Retest Residential

Master and Residential

PAYMENT TYPE:

Check (Payable to IAEI)

Money Order

Credit Card

 Name on Credit Card

 Total Fees Enclosed/to be Charged

 Credit Card Number

 Exp. Date

 Signature

LICENSE AND/OR REGISTRATION HELD

License Type License #	Date Issued	State	License Limitations (Limited, Unlimited, etc.)
Architect			
Engineer			
Electrical Contractor			
Electrical Inspector			

<u>EDUCATION</u>	Name & Location of School	Dates Attended – from/to mo/yr - mo/yr	Years Completed	Diploma/GED or degree State major and yr received
High School				
Community College				
College/University				
Graduate/Professional				

WORK EXPERIENCE

Electrical Contractor Experience — List the sizes of buildings/installations (both in square feet and story height) in which you were in responsible charge of installation under your license or as an employee of another licensee. (Use additional sheets).

Inspector Experience — List the sizes of buildings/installations (both in square feet and story height) in which you were in responsible charge of electrical inspections. (Use additional sheets).

Other Experience — List the duties in electrical related fields or duties of that employment (Use additional sheets).

EXPERIENCES RECORD: Work History (Include related experiences. use additional sheets if necessary).

Note: it is recommended that the applicant be already employed as an electrical inspector in order to complete the Practicum Phase.

Present Employer		Address of Employer
Date Employment Started	Job Title	Supervisor/Reference
Date Employment Ended	Phone Number	E-mail Address

Duties: Experience: Work History (Use Additional Sheets if necessary)

- Electrical Contractor
- Inspector Experience
- Other: _____

Previous Employer		Address of Employer
Date Employment Started	Job Title	Supervisor/Reference
Date Employment Ended	Phone Number	E-mail Address

Duties: Experience: Work History (Use Additional Sheets if necessary)

- Electrical Contractor
- Inspector Experience
- Other: _____

IAEI reserves the right to accept or reject applications. Once accepted, the applicant will be notified by mail. Please allow a turn-around time of thirty days from the date of receipt.

By signing and submitting this completed form, I certify that all statements are true, complete, and correct to the best of my knowledge and belief and are made in good faith. I authorize investigations of all statements made in this application and also release this information to the IAEI Certification Program. I accept the conditions set forth concerning the administration of the test and the reporting of test scores. I am assuming full responsibility for exam selection and I understand that fees are not refundable or transferable.

Signature _____ Date _____

**Upon completion of this form, please return form and payment to the following address:
IAEI Certification Department • P. O. Box 830848 • Richardson, Texas 75083-0848**



REQUEST FOR SPECIAL EXAMINATION ACCOMMODATIONS

If you have a disability covered by the Americans with Disabilities Act, please complete this form and the Documentation of Disability-Related Needs on the reverse side so your accommodations for testing can be processed efficiently. The information you provide and any documentation regarding your disability and your need for accommodation in testing will be treated with strict confidentiality.

CANDIDATE INFORMATION

Social Security #

Name (Last, First, Middle)

Street Address

City, State, Zip Code/Postal Code

Country

()

Daytime Phone Number

E-mail Address

Special Accommodations

I request special accommodations for the _____ examination.

Please provide (check all that apply):

- Accessible testing site
- Special seating
- Reader
- Extended testing time (time and a half)
- Distraction-free room
- Other special accommodations (Please specify.)

Comments: _____

Signed: _____ Date: _____

Return this form with your examination application and fee to:
IAEI Certification Department, P. O. Box 830848, Richardson, TX 75083-0848.



DOCUMENTATION OF DISABILITY-RELATED NEEDS

Please have this section completed by an appropriate professional (education professional, physician, psychologist, psychiatrist) to ensure that Prov/ExamRoom.AI is able to provide the required examination accommodations.

PROFESSIONAL DOCUMENTATION

I have known _____ since ____ / ____ / ____ in my capacity as a
Candidate's Name Date

Professional Title

The candidate discussed with me the nature of the examination to be administered. It is my opinion that, because of this candidate's disability described below, he/she should be accommodated by providing the special arrangements listed on the Request for Special Examination Accommodations form.

Comments: _____

Signed: _____ Title: _____

Printed Name: _____

Address: _____

Telephone Number: _____

Date: _____ License # (if applicable): _____

Return this form with your examination application and fee to:
IAEI Certification Department, P. O. Box 830848, Richardson, TX 75083-0848.



INTERNATIONAL ASSOCIATION OF ELECTRICAL INSPECTORS

901 Waterfall Way, Suite 602

Richardson, TX 75080-7702

972.235.1455

FAX: 972.235.3855

E-mail: cei@iaei.org