



Denver, Colorado Contractor/Trades Examination Information Bulletin

Published October 1, 2013

This edition supersedes all bulletin editions published prior to the above date.

This bulletin answers most questions raised by examination candidates. Please read it carefully. You will find it a useful reference throughout your registration and examination process

**International Code Council
Certification and Testing Department
Birmingham District Office
900 Montclair Road
Birmingham, AL 35213**

1-888-ICC-SAFE (422-7233), ext. 5524

www.iccsafe.org/contractor

SUMMARY OF BULLETIN CHANGES

Date of Change	Section Affected	Revision
October 7, 2011	Denver, Colorado Contractor/Trades Examinations	Listed exams scheduled to retire 11/1/11
November 1, 2011	Denver, Colorado Contractor/Trades Examinations	Replaced Denver-specific exam titles with National equivalents
January 1, 2012	Computer-based Testing	Updated payment options
January 1, 2012	Computer-based Testing	Updated holiday schedule for 2012
January 1, 2012	Test Site Regulations	Revised list of acceptable items at test site
March 1, 2012	Denver, Colorado Contractor/Trades Examinations	Re-added 377 exam
October 1, 2013	Front cover	Updated revision date

Use the checklists and information summaries in this bulletin to familiarize yourself with the testing process. Be sure to completely read this bulletin before scheduling your examination.

You are responsible for following all policies and regulations found in this document. Not reading this bulletin does not release your responsibility for following these procedures.

How do I...

- schedule an exam? Visit www.pearsonvue.com/icc or call Pearson VUE at 1-877-234-6082
- change my name or address? Fax or mail ICC a letter containing your name, old and new addresses, contact phone number, **and signature**; ICC will advise if additional documentation is needed
- request a duplicate pass letter? Visit www.iccsafe.org/contractor for a request application
- review an exam I failed? See page 9 for more information on the exam feedback and appeals process
- request special testing accommodations? Call Pearson VUE at 1-800-466-0450 and ask for special arrangements
- make comments about an exam I took? See page 9 for more information on the exam feedback and appeals process
- reschedule an exam? Call Pearson VUE at 1-877-234-6082 prior to your scheduled exam—see page 16 for deadlines
- cancel an exam? Call Pearson VUE at 1-877-234-6082 prior to your scheduled exam—see page 16 for deadlines
- find my exam code (ID)? See pages 18-27 for the exam outline listings in this bulletin
- know what I can take into the exam? See page 11 for the Test Site Regulations section
- obtain the books for my exam? Most references can be purchased at www.iccsafe.org/store; more information is found in the exam outline listings starting on page 18
- access information on my passed exams on ICC's website? Visit www.iccsafe.org/contractor to access the Official Contractor Exam Pass List link

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International Code Council Vision

Protect the health, safety, and welfare of people
by creating safe buildings and communities.

International Code Council Mission

To provide the highest quality codes, standards, products, and services
for all concerned with the safety and performance of the built environment.

Information contained in this bulletin is deemed accurate as of the time of printing.

Contents are subject to change at any time.

For the most updated information, visit www.iccsafe.org/contractor.

Note: Examination requirements, including registration/scheduling, dates, locations, fees, and references are subject to change. Please make sure that you have the most current information before registering for/scheduling any examination. For up-to-date information on Code Council examinations, go to www.iccsafe.org/contractor or call 1-888-ICC-SAFE (422-7233), ext. 5524.

About Code Council Contractor/Trades Testing

The International Code Council's Contractor/Trades examination program is an independent testing program designed to provide licensing agencies with information regarding qualified contractors and trades professionals. Participating in the Code Council examination program does not guarantee that a licensing agency will award you a license. However, the Code Council examination program serves as an independent appraisal of your competency in the construction field, and your test results may be used by licensing agencies to satisfy the requirements for testing.

Examination information, including registration/scheduling requirements, dates, locations, fees, and references, are subject to change. **Candidates should make sure they have the most current information before registering for/scheduling a Code Council examination by going to www.iccsafe.org/contractor.**

General Testing Information

The purpose of this bulletin is to provide you with information regarding how to schedule and take your contractor/trades examination. Prior to scheduling a test with this program, you should first consult with your local or state licensing agency to determine which examination you should take. Some agencies may also require you to meet certain prequalification criteria prior to testing. You should therefore start your testing process by determining what test your local agency requires of you.

This bulletin is designed to follow the testing process from the initial application for testing up until the time when testing results are provided.

Administrative Rules and Procedures



FAQ

How can I become licensed?

The International Code Council is not a licensing agency. If you want to become licensed in a city, county, or state that participates with the Code Council, that jurisdiction will require you to take and pass a Code Council examination. Upon successful completion of the examination, contact the jurisdiction for any other requirements in order to become licensed.

For detailed information on Contractor/Trades examinations and participating jurisdictions, visit our website at www.iccsafe.org/contractor.

How do I schedule a test?

It is your responsibility to read the Examination Information Bulletin for important information on examination requirements, procedures, and references allowed during the examination administration.

For computer-based testing through Pearson VUE, the Code Council's computer-based testing vendor, you may schedule an examination online at www.pearsonvue.com/icc. Follow the directions under "Contractor/Trade Licensing." You may also schedule an examination over the phone by contacting Pearson VUE at 1-877-234-6082, following the scheduling procedures listed in this bulletin.

Pre-payment is required to schedule an examination through any of the above methods.

When can I test?

Computer-testing is administered by Pearson VUE frequently at over 250 sites across the nation. Pearson VUE test dates and sites can be found on their website at www.pearsonvue.com/icc.

How often can I test?

You must wait 10 days before retaking a failed exam. It is strongly recommended that you allow time to study the approved references before registering to test a second time.

What examination do I need to take?

As requirements for employment differ from jurisdiction to jurisdiction, the Code Council cannot recommend specific examinations to you. We strongly encourage you to contact the jurisdiction in which you wish to work for more information on their specific exam requirements for licensure.

How do I know if pre-approval is required for me to test?

Contact the licensing agency or review the appropriate National Contractor/Trades Examination Information Bulletin on the Code Council's website at www.iccsafe.org/contractor.

What references or code books are the exams based on?

The approved references for each exam are listed in the Examination Outlines section of this bulletin. For the most up-to-date bulletin information, visit our website at www.iccsafe.org/contractor. You can also contact the Code Council at 1-888-422-7233 ext. 5524 to request a bulletin.

Are the examinations open book?

Most Contractor/Trades exams are open book. Refer to the Examination Outlines section of this bulletin for open/closed book requirements for specific exams. For the most up-to-date bulletin, visit www.iccsafe.org/contractor. Additional policies governing the use of references can be found in the Test Site Regulations section of this bulletin.

When will I receive my results?

Results for examinations taken via computer are available immediately after completion of the examination.

I didn't receive my pass letter. Can I have another mailed to me?

Yes, but the pass letter must be requested within 90 days from the date of the passed examination to have another mailed without a fee. If a resend of a pass letter is requested after 90 days from the exam, a fee will be charged. For fees, go visit www.iccsafe.org/contractor.

What type of question format will be included in the examination?

Test questions are in four-option, multiple-choice format, with one answer on each question scored as correct. Due to the rigorous psychometric processes used by the Code Council in exam development, questions do not follow patterns (e.g., "the most common answer is 'B'").

Can't I just look up all of the answers in the books?

Because of the time constraints, you will not have time to look up all of the answers. For those answers you must look up, you must be VERY familiar with the references to avoid wasting time searching for information. First impressions are often the most accurate, but you may change your answers if time allows.

How long are the examinations?

The length and allowed time varies depending upon the subject matter. To get the most updated information on examinations, go to www.iccsafe.org/contractor.

How many examinations can I take at one administration?

For computer-based exams, in most cases you may take two exams in one day, as long as each examination is only two hours in length.

Should I guess if I don't know the answer to a question?

There is no guessing penalty, so it is to your advantage to answer every question. Remember to base your answers on the listed references for each exam, not solely on long-time field practices.

What score do I need to pass the test?

Most Contractor/Trades examinations require a candidate to answer at least 70 percent of their questions correctly in order to pass the exam. The Master Electrician examination requires 75 percent of the questions to be answered correctly to pass. Particular licensing agencies may require a passing score of higher than 70. It is important that you carefully read the relevant bulletin or contact the licensing agency for information regarding their minimum passing requirement.

Can my exam score be cancelled?

The Code Council reserves the right to revoke or withhold any examination scores if, in its sole opinion, there is adequate reason to question their validity. Reasons are:

- Giving or receiving assistance with answers during testing
- Using unauthorized materials during testing
- Failing to abide by the rules presented or directions from the proctor(s)
- Attempting to, or removing examination materials or questions from the testing center.
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In cases of examination irregularities which are suspected at testing centers, the scores of the individual(s) involved will not be released unless approved by the Code Council. Additional sanctions may be authorized by the Board, which may include restrictions on retesting for up to three (3) years.

Some scores may be rendered invalid because of circumstances beyond the examinee's control, such as faulty examination materials or mistiming. These situations will be investigated; when such occurrences result in cancellation of an examinee's scores, the Code Council will arrange for a makeup examination for the examinees concerned.

The Code Council has implemented procedures to minimize the potential of negative conditions at the examination site such as bad lighting, excessive noise, or uncomfortable temperature conditions. In unlikely cases where such conditions may occur, the required passing score is not modified or changed. If a candidate finds unfavorable conditions at the examination site, we recommend the candidate immediately notify the proctor.

Feedback and Appeals Process

To have Code Council Certification and Testing staff review comments or challenges on specific exams, exam items, or any issues encountered during your examination, you must submit a Comment/Challenge form to the Code Council. The form is available by request to the proctor following completion of your exam or on the Code Council website at www.iccsafe.org/contractor.

Our experience shows that the best comments are those that come as soon after the testing process as possible. Include sufficient amount of detail to aid staff in the review of your challenged question(s) or issues related to the exam experience. Following receipt of your challenge, Certification and Testing staff will investigate each comment for merit and final determination of approval or denial of your challenge.

You will be mailed a response from Code Council staff within 15 business days from receipt of the form by the Code Council; a request for staff review is based solely upon the most recent examination taken.



IMPORTANT NOTE: If you retake a failed exam on which you have submitted an appeal, you will forfeit your appeal opportunity for that exam attempt.

Comment/Challenge forms must be mailed or faxed to the following address or fax number:

International Code Council
ATTN: Candidate Services Coordinator
900 Montclair Road
Birmingham, AL 35213
Fax: 205-599-9884

Review Session

Reviews are designed to review missed questions and your original, incorrect answers on the most recently taken exam. It is **not** an opportunity to change answers on an examination or retake the exam.

During the Review, you may challenge questions you feel contain errors, or to defend your original answer. Review sessions are limited to one half of the original examination time. You may bring in any of the references listed in this bulletin as approved references for the examination you are challenging.

Challenges completed during a review session will be returned to Certification and Testing for analysis, and you will be provided a response to any items on which you complete a challenge form during your review session.

To be eligible for a review, you must have scored within **10 points** of the minimum passing score. Reviews must be scheduled no more than **ninety (90)** days following your most recent testing session.

The cost of the review is \$50 for each test reviewed. To review an exam taken via computer, you will schedule directly with Pearson VUE.

Hand Score

You may request a hand score of your examination to verify the accuracy of your reported score. Please be aware that the Code Council and Pearson VUE follow very careful procedures to ensure the accuracy prior to issuance of score reports.

The cost of a hand score is \$25. You must complete the Hand Score Request form (at www.iccsafe.org/contractor) and submit this form with a copy of your score report to the Code Council. Hand score requests must be submitted to the Code Council within 90 days from your exam date.

You will be mailed the results of the hand score within 15 business days from receipt of your request.

Please know that it is very rare that a score will be changed based on a hand score, as the automated scoring systems are very accurate; a request for hand score is based solely upon the most recent examination taken.

Test Site Regulations

To ensure the security of examination materials, reliable test results, and public confidence in the integrity of certified professionals, the rules and procedures below are strictly enforced at all Code Council examinations.

What should I bring to the test site?

Examinees must provide their testing confirmation number (that was provided by the Pearson VUE representative at the time of exam registration) at the testing site on the exam day in order to be admitted to take the exam.

The name on the exam reservation must match the name on the ID provided. If it does not, you will not be allowed to test, and will forfeit your exam fee. Neither the Code Council nor Pearson VUE can make an exception to this policy. If you are unable to present identification as required by the Code Council and Pearson VUE, or have questions about what will be allowed, you must call Pearson VUE at least two days prior to your scheduled exam to make other arrangements.

Examinees may bring the following items to the examination:

1. Reference(s) as listed in this Examination Information Bulletin for the applicable exam—**no other reference material will be allowed into the testing center:**
 - Bound (original bound book, three-ring binder, or stapled)
 - Notes written in ink or highlighted in code sections
 - Permanently attached tabs (tabs that can't be removed without destroying the page)
 - Pencil notes in your references that are highlighted prior to arrival at the test center
 - **Photocopies of copyrighted materials are not allowed**
2. Magnifying glass
3. Eyeglasses, if necessary
4. Architects' scale or rule
5. Battery-operated calculator:
 - Nonprogrammable
 - Not capable of storing examination information
 - No ribbon or paper printing capabilities
6. Foreign language/English translation dictionaries, if needed

What should I leave at home?

1. Any kind of ink (ballpoint, felt-tip, gel, etc.) pens, pencils, highlighters, writing paper, or briefcases
2. Personal items such as purses, wallets, or watches—lockers are available at Pearson VUE for small items, but will not accommodate laptops, briefcases, or large purses or bags
3. Calculators with print capability and/or that store formulas
4. Copying, recording, or photo devices
5. Cell phones, beepers, radios, MP3 players, and/or PDAs

What are test proctors and what do they do?

The test proctors have two main jobs: they give the examinations and make sure the exam materials at the test site are protected. Proctors are well-trained and treat candidates with respect, and in turn, expect the same level of respect from candidates. Threatening a proctor or interfering with the administration of an examination at *any* time may be considered a criminal offense and punishable by law. In addition, proctors cannot discuss contents of the exam or reference materials with a candidate.

Proctors have the right to remove a candidate's test and ask the individual to leave the building if the candidate:

- Gives or receives help during the examination
- Attempts to remove exam materials or notes from the room
- Creates a disturbance
- Copies or attempts to copy examination questions or answers
- Is found to have prohibited materials (cell phone, recorder, etc.) during the exam

If a candidate is asked to leave the test site for any reason, the candidate will not receive a refund, may jeopardize their right to take a Code Council examination in the future, and may face possible prosecution.

What does the Code Council expect of me?

Please arrive at the exam site on the proper date, at the proper time, and with proper identification. Determine in advance the exact location of the test site, how to get there, and how much time it will take you to get to the site. Examinations will be given only on the date and time scheduled.

Please arrive at the test site with required reference(s), if desired, for use during the exam. Required examination references are listed with the examination outlines found in this bulletin. References for examinations are not supplied by the Code Council or the testing center.

Examinees must know, understand, and adhere to all of the regulations governing Code Council examinations as listed in this bulletin.

Arrive at the exam site at least **30 minutes** before the examination is scheduled to begin. Remember, it is your responsibility to already be familiar with the regulations governing Code Council examinations.

What can I expect at the test site?

The proctor will check your identification, have you sign in, and may assign you a seat. The examination proctor will explain the procedures for taking the examination; answer questions related to taking the exam and provide notification to begin the examination.

Before the Exam

Metal detectors may be randomly used to search examinees entering and/or leaving the exam room. You will be asked to empty all of your pockets and place personal items in a locker. Proctors may inspect all materials an examinee carries into and from the exam room. If your reference materials do not meet test site regulations (relating to tabs, pencil notes, etc.), **you will not be allowed to take these references into the exam room.** You will still be allowed to test, but without these materials.

The Code Council randomly videotapes examination sessions.

You are not allowed to write or mark in or on your reference books during the examination.

While the examination is being administered, you are not allowed to leave the building and return to the exam room. If you wish to leave the exam room for any reason, you must receive permission from the proctor and turn in all of your examination materials and references to the proctor. Only one examinee at a time is allowed outside the exam room, and you are not allowed additional test time for time spent outside the exam room.

During the Exam

You are not allowed to communicate, verbally or nonverbally, with other candidates during the examination, and you may not share references.

It is **highly recommended** that if you are taking a computer-based exam, especially for the first time, you complete the tutorial available to you at the beginning of your exam. The time spent on the tutorial does not count against your exam time. You will receive important information about how to keep track of your time remaining, how to mark items for review, where to find the number of the question you are on, and more.

For computer-based examinations, there is an optional clock on the computer that counts down to display the time remaining. (Information on turning on the clock is available in the tutorial prior to the exam.) When the time limit is up for the examination, the computer will end the test.

After the Exam

If you pass your examination, you cannot retake the examination you passed. If you do not pass your examination and wish to comment on your experience, please see the section of this bulletin titled "Feedback and Appeals Process."

Computer-based Testing

How do I register for a computer-based exam?

Some licensing agencies may require you to apply through them prior to testing with ICC, while others may not. You should check with the licensing agency for licensing requirements prior to registering for an examination.

Computer-based certification examinations are administered for the Code Council by Pearson VUE (formerly Promissor), a professional test administration company. **To register to take a Code Council computer-based Contractor/Trades exam, call Pearson VUE at 1-877-234-6082, or visit Pearson VUE's website at www.pearsonvue.com/icc. You must provide the EXAM ID and EXAM TITLE, whether registering online or by telephone.**

Online reservations are available 24 hours a day, 7 days a week. The Code Council encourages candidates to register online, for your convenience. You must provide an email address to schedule an exam online, and Pearson VUE will email you a confirmation letter containing the date and time of your exam, along with test day instructions. **It is your responsibility to check this confirmation letter to ensure the exam listed is the one you wish to take.**

Pearson VUE's customer care reservations and customer service lines are open Monday through Friday from 8:00 a.m. to 11:00 p.m. (Eastern Time), Saturday from 8:00 a.m. to 5:00 p.m., and Sunday from 10:00 a.m. to 4:00 p.m. When you call to make your examination reservation, a representative will help you select the optimal test date and location for your schedule, provide instructions and directions, and give your examination reporting time. Walk-in testing is not available.

You may make an exam reservation up to one business day prior to your desired exam date, depending on space availability at the test center.

You must have the following information available at the time you are registering for a Code Council computer-based examination:

1. Exam ID and title. Exam IDs and titles can be found in this bulletin
2. Your full name, address, and home and work telephone numbers
3. Jurisdiction/state in which you wish to be licensed
4. Selected examination date and location of the area you desire to take the exam
5. Your credit card or payment information

Where are test sites available?

To locate test sites in your area, visit the Pearson VUE website at www.pearsonvue.com/icc for an updated listing of sites. Be aware that test sites are subject to change.

How do I pay for my exam?

Examination fees must be paid by credit card, debit card (issued through VISA or MasterCard) or electronic check at the time a reservation is made, NOT at the test center. Candidates who do not have or do not wish to use a credit card, debit card, or personal checking account may choose to prepay their examination fees using a voucher. Vouchers can be purchased online at www.pearsonvue.com/vouchers/pricelist/icccert.asp by credit card, either singly or in volume. To redeem a voucher as payment when scheduling a test, simply indicate “voucher” as the payment method and provide the voucher number. **All vouchers are pre-paid, non-refundable, and non-returnable.** Vouchers expire twelve (12) months from the date they are issued, and voucher expiration dates cannot be extended. The exam must be taken by the expiration date printed on the voucher.

Do I need to be a computer whiz?

Examinations are administered on a personal computer (PC). Candidates are not required to have any computer knowledge to take the examination on the PC. Before you begin your test, you may take up to 15 minutes to practice with the sample questions. Timing of the examination does not begin until you look at the first question of the actual examination. You will be allowed to change your answers, mark answers for review, go back to skipped questions and, time permitting, review your test.

When are exams available?

Code Council examinations are administered nationally, Tuesday through Saturday (exceptions noted below). Testing sessions are generally held at 8:00 a.m. and 1:00 p.m. Some test centers are open daily, while others are open on specific days of the week. In some locations, exams are administered on a monthly basis. Pearson VUE offices are closed in observance of the following holidays:

- New Year's Day
- Martin Luther King, Jr. Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving (including Friday following holiday)
- Christmas Eve and Christmas day

What if the weather's bad?

Test administrations will be delayed or canceled only in emergencies. If severe weather or a natural disaster makes the test center inaccessible or unsafe, the test administration may be canceled. Call Pearson VUE at 1-800-274-2615 to check weather or other emergency delays.

What if I need to cancel or reschedule an exam?

To change or cancel your reservation without monetary penalty, you must notify Pearson VUE two business days before your scheduled examination. When this is done, the fee from your first appointment will be applied to your new test date. If you call Pearson VUE less than two business days before your scheduled examination, you will be charged the full examination fee. The fee from your first appointment will be owed in addition to the fee for the new test date.

What if I can't make it to my exam?

There are no refunds for examinations not taken. All candidates seeking excused absences must submit written verification and supporting documentation of the situation to Pearson VUE within 14 days of the original examination date. Illness excuses must be written by the attending physician. Inclement weather is not acceptable as an excused absence. If, on the day you are scheduled to test, you are unable to attend the examination for which you were scheduled, you may be excused without monetary penalty for the following reasons:

1. Documented illness, either yourself or immediate family member;
2. Death in the immediate family;
3. Disabling traffic accident;
4. Court appearance or jury duty; or
5. Military duty.

Written verification and supporting documentation for excused absences must be submitted to the Pearson VUE Program Coordinator via fax or mail within fourteen (14) days of the original examination date.

Pearson VUE
c/o Candidate Services
P.O. Box 8588
Philadelphia, PA 19101
Fax: 888-204-6291

If you are absent from an examination that you were scheduled to attend, and you did not reschedule or cancel according to the policy, you will owe Pearson VUE the full examination fee for that missed examination.

When do I get my results?

After completing the test, candidates will raise their hands and the assessment center manager will retrieve the unit for immediate scoring. Failing candidates will be provided with diagnostic information on their performance on major content areas of each examination taken. This information is not used to determine whether a candidate passes or fails; it is for self-evaluation only. Candidates who pass will be notified with the word "PASS." No numerical score is provided to passing candidates. Your score report will include an ICC ID number which participating jurisdictions can use to verify your passing status on the ICC website.

What if I have special needs?

Pearson VUE certifies that it shall comply with the provisions of the Americans with Disabilities Act (ADA). If you need special arrangements for testing, please call 1-800-466-0450 to request special testing services. This telephone number is available for reservations Monday through Friday, 7:00 a.m. to 6:00 p.m. CST. All examination sites have access for candidates with disabilities.

Pearson VUE will provide auxiliary aids and services, except where it may fundamentally alter the examination or results. It is recommended that you submit a written request for special test arrange-

ments and services approximately two to three weeks in advance of your desired test date. In addition, candidates should indicate when registering for re-examination that special arrangements were made or services used for the prior test administration, and that these services will be needed again for the upcoming test date. Supporting documentation can be faxed to 610-617-9397.

Pearson VUE is equipped with TDD (Telecommunications Devices for the Deaf) to assist deaf and hearing-impaired candidates. TDD calling is available during standard business hours through a special Pearson VUE toll-free number, 1-800-274-2617. This phone number is for express use by candidates with compatible TDD equipment.

Pearson VUE will determine the time and place of specially arranged examinations and confirm these arrangements with the candidate directly. In some cases, there may be an additional fee for special arrangements.

In the event that an examination is offered only on Saturdays, candidates who cannot take the examination for religious reasons may request a non-Saturday test administration. Such a request must be put in writing on official stationery by your religious advisor and sent via fax machine, or mailed to Pearson VUE. Non-Saturday testing for this circumstance is done only on a prearranged basis.

Denver, Colorado Contractor/Trades Examinations

Please visit www.iccsafe.org/contractor for the most up-to-date information. Outlines are subject to change.

Building Examination Outlines

N11 National Standard General Building Contractor (A)

90 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—4-hour time limit

Content Area	% of Total	Reference
Administration	8%	2009 <i>International Building Code</i> ®
Building Planning	6%	ACI 318-08 <i>Building Code Requirements for Structural</i>
Plan Reading	12%	<i>Concrete and Commentary</i> <u>or</u> 2009 ICC <i>Concrete Manual</i>
Life Safety	12%	
Roof Assemblies and Rooftop Structures	13%	
Soils and Foundations	11%	
Concrete	4%	
Masonry	9%	
Steel	4%	
Wood	13%	
Gypsum Board and Plaster	2%	
Special Construction	2%	
Energy Efficiency	2%	
Total	100%	

N12 National Standard Building Contractor (B)

80 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—4-hour time limit

Content Area	% of Total	Reference
Administration	6%	2009 <i>International Building Code</i> ®
Building Planning	5%	2009 <i>International Residential Code</i> ®
Plan Reading	13%	ACI 318-08 <i>Building Code Requirements for Structural</i>
Life Safety	9%	<i>Concrete and Commentary</i> <u>or</u> 2009 ICC <i>Concrete Manual</i>
Exterior Walls	3%	
Roof Assemblies and Rooftop Structures	8%	
Soils and Foundations	11%	
Concrete	5%	
Masonry	11%	
Steel	6%	
Wood	18%	
Glass and Glazing	1%	
Gypsum Board and Plaster	3%	
Special Construction	1%	
Energy Efficiency	1%	
Total	100%	

Building Examination Outlines (continued)

N13 National Standard Residential Building Contractor (C)		80 multiple-choice questions Exam fee: \$100 (CBT) Open book—4-hour time limit
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Content Area	% of Total	Reference
Administration	9%	2009 <i>International Residential Code</i> ®
Building Planning	11%	ACI 318-08 <i>Building Code Requirements for Structural</i>
Plan Reading	13%	<i>Concrete and Commentary</i> <u>or</u> 2009 ICC <i>Concrete Manual</i>
Life Safety	5%	
Exterior Walls	3%	
Roof Assemblies and Rooftop Structures	8%	
Soils and Foundations	11%	
Concrete	3%	
Masonry	8%	
Wood	24%	
Glass and Glazing	3%	
Gypsum Board and Plaster	3%	
Energy Efficiency	3%	
Total	100%	

491 Colorado (Denver) Demolition Class A		50 multiple-choice questions Exam fee: \$100 (CBT) Open book—2-hour time limit
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Content Area	% of Total	Approved References
Job Assessment	24%	2003 <i>International Building Code</i> ®
Site Preparation	10%	<i>Denver Building Code, Amendments and Policies (DBC 2004), Chapter 1</i>
Demolition	26%	<i>Denver Building Code, Amendments and Policies (DBC 2004), Licensing,</i>
Safety	40%	Certification, Registration, Permits, Plans, Inspection, and
Total	100%	Certificate of Occupancy
		<i>Denver Building Code, Amendments and Policies (DBC 2004), Chapter 33,</i>
		Sitework, Demolition, and Construction
		<i>Denver Building Code, Amendments and Policies (DBC 2004), Denver</i>
		Building Permit Policy, IBC Amended 3303
		OSHA 29 CFR 1904, Recording and Reporting Occupational Injuries and
		Illnesses
		OSHA 29 CFR 1910, Occupational Safety and Health Standards
		OSHA 29 CFR 1926, Safety and Health Regulations for Construction

Building Examination Outlines (continued)

492 Colorado (Denver) Demolition Class B

30 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—1-1/2-hour time limit

Content Area	% of Total	Approved References
Job Assessment	46%	2003 <i>International Building Code</i> ®
Site Preparation	4%	<i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Chapter 1
Demolition	15%	<i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Licensing,
Safety	35%	Certification, Registration, Permits, Plans, Inspection, and
Total	100%	Certificate of Occupancy <i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Chapter 33, Sitework, Demolition, and Construction <i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Denver Building Permit Policy, IBC Amended 3303 OSHA 29 CFR 1904, Recording and Reporting Occupational Injuries and Illnesses OSHA 29 CFR 1910, Occupational Safety and Health Standards OSHA 29 CFR 1926, Safety and Health Regulations for Construction

493 Colorado (Denver) Moving Supervisor

30 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—1-1/2-hour time limit

Content Area	% of Total	Approved References
Job Preparation	20%	2003 <i>International Building Code</i> ®
Moving	40%	<i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Chapter 1
Safety	40%	<i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Licensing,
Total	100%	Certification, Registration, Permits, Plans, Inspection, and Certificate of Occupancy <i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Chapter 33, Sitework, Demolition, and Construction <i>Denver Building Code, Amendments and Policies (DBC 2004)</i> , Denver Building Permit Policy, IBC Amended 3303 OSHA 29 CFR 1904, Recording and Reporting Occupational Injuries and Illnesses OSHA 29 CFR 1910, Occupational Safety and Health Standards OSHA 29 CFR 1926, Safety and Health Regulations for Construction

Electrical Examination Outlines

N22 National Standard Master Sign Electrician

60 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—3-hour time limit

Content Area	% of Total	Reference
Basic Electricity and Wiring	23%	2008 <i>National Electrical Code</i>
Electrical Materials and Installation	21%	
Motors and Transformers	3%	
Outside Branch Circuits and Feeders	21%	
Services	6%	
Electrical Signs and Outdoor Lighting	26%	
Total	100%	

380 Colorado (Denver) Journeyman Electrical Signal

40 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-hour time limit

Content Area	% of Total	Approved References
Fire Alarm Application and Design	5%	2009 <i>International Building Code</i> [®]
Fire Alarm Installation	35%	2011 <i>National Electrical Code</i>
General Low-voltage Wiring	40%	2010 NFPA 72
Emergency Voice Alarm Communications	5%	
Monitoring	5%	
Fire Alarm Testing	10%	
Total	100%	

377 Colorado (Denver) Electrical Signal Supervisor

40 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-hour time limit

Content Area	% of Total	Approved References
Fire Alarm Application and Design	20%	2009 <i>International Building Code</i> [®]
Fire Alarm Installation	30%	2011 <i>National Electrical Code</i>
General Low-voltage Wiring	30%	2010 NFPA 72
Emergency Voice Alarm Communications	5%	
Monitoring	5%	
Fire Alarm Testing	10%	
Total	100%	

Electrical Examination Outlines (continued)

490 Colorado (Denver) Access Control Supervisor

60 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-hour time limit

Content Area	% of Total	Approved References
Design, Layout, and Planning	30%	2009 <i>International Building Code</i> ®
Doors, Gates, and Turnstile Assemblies	10%	2011 <i>National Electrical Code</i>
Wiring	20%	<i>Denver Building Code</i> , Appendix L. Access Control
Electronic Access Control	30%	
Interfaces	10%	
Total	100%	

494 Colorado (Denver) Electrical Sign Supervisor

50 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-hour time limit

Content Area	% of Total	Approved References
General Knowledge	19%	2009 <i>International Building Code</i> ®
Services and Service Equipment	16%	2011 <i>National Electrical Code</i>
Feeders	4%	<i>Denver Building and Sign Code and Amendments</i> (DBC 2004)
Branch Circuits and Conductors	14%	— Chapter 1—Title, Purpose, and Scope
Wiring Methods and Materials	5%	— Licensing, Certification, Registration, Permits, Plans, Inspection, and Certificate of Occupancy
Equipment and Devices	10%	— Chapter 2—Definition and Abbreviations
Control Devices	7%	— Appendix H—Signs
Motors and Generators	10%	
Special Occupancies, Equipment, and Conditions	5%	
Plan Reading and Analysis	10%	
Total	100%	

Fire Protection Examination Outline

N35 National Standard Fire Suppression Installer/Worker

60 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-hour time limit

Content Area	% of Total	Reference
Inspection	15%	2009 <i>International Fire Code</i> ®
Emergency Impairment	5%	2009 <i>International Building Code</i> ®
Piping Systems	20%	2007 NFPA 13, 13D, 13R, 14, and 20
Water Supply	10%	2008 NFPA 25
Fire Pumps	10%	
Special Systems	20%	
Accepting Systems	20%	
Total	100%	

Mechanical Examination Outlines

N29 National Standard Master Mechanical 100 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—4-hour time limit

Content Area	% of Total	Reference
Appliances and Equipment	10%	2009 <i>International Mechanical Code</i> ®
Chimneys and Vents	7%	2009 <i>International Fuel Gas Code</i> ®
Combustion Air	8%	2008 <i>National Electrical Code</i>
Duct Systems	12%	
Electrical	9%	
Exhaust and Ventilation Systems	8%	
Fuel Supply Systems	7%	
General Requirements and Plan Analysis	33%	
Special Requirements	4%	
Water	2%	
Total	100%	

N31 National Standard Journeyman Mechanical 50 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—3-hour time limit

Content Area	% of Total	Reference
General Requirements	46%	2009 <i>International Mechanical Code</i> ®
Appliances and Equipment	14%	2009 <i>International Fuel Gas Code</i> ®
Exhaust and Ventilation Systems	2%	2008 <i>National Electrical Code</i>
Duct Systems	14%	
Combustion Air	6%	
Chimneys and Vents	6%	
Fuel Supply Systems	2%	
Special Requirements	6%	
Electrical	4%	
Total	100%	

N32 National Standard Residential Mechanical—Class C 70 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—3-hour time limit

Content Area	% of Total	Reference
General Requirements	29%	2009 <i>International Residential Code</i> ®
Appliances and Equipment	4%	
Duct Systems	14%	
Combustion Air	21%	
Chimneys and Vents	9%	
Fuel Supply Systems	13%	
Electrical	10%	
Total	100%	

Mechanical Examination Outlines (continued)

228 Colorado (Denver) Refrigeration Operator

50 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-1/2-hour time limit

Content Area	% of Total	Approved References
Theory, Terminology, and General Requirements	18%	2009 <i>International Mechanical Code</i> ®
Compressors and Types of Systems	10%	2011 <i>National Electrical Code</i>
Evaporators, Condensers, and Cooling Towers	10%	<i>Modern Refrigeration and Air Conditioning</i> , 18th Edition
Piping Inspection and Field Testing	8%	
Air Ducts and Insulation	6%	
Electrical and Controls	22%	
Refrigerants	12%	
Operation Procedures	6%	
Maintenance and Repairs	8%	
Total	100%	

227 Colorado (Denver) Stationary Engineer

60 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—3-hour time limit

Content Area	% of Total	Approved References
Water Supply Treatment and Feed Systems	7%	2009 <i>International Mechanical Code</i> ®
Fuels and Firing Methods	20%	2009 <i>International Fuel Gas Code</i> ®
General Code Application and Venting	10%	<i>Boiler Operator's Guide</i> , 4th Edition
Startup and Shutdown Operations	5%	<i>Steam Plant Operation</i> , 8th Edition
Piping, Pumps, and Valving	10%	
Controls and Control Systems	20%	
Maintenance and Repairs	20%	
Tests and Inspections	8%	
Total	100%	

Mechanical Examination Outlines (continued)

N33 National Standard Master Gas Pipe Fitter 75 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—3-hour time limit

Content Area	% of Total	Reference
General Requirements and Plan Analysis	39%	2009 <i>International Fuel Gas Code</i> ®
Appliances and Equipment	13%	
Fuel Supply Systems	17%	
Combustion Air	12%	
Chimneys and Vents	13%	
Special Requirements	5%	
Total	100%	

N34 National Standard Journeyman Gas Pipe Fitter 50 multiple-choice questions
Exam fee: \$100 (CBT)
Open book—2-hour time limit

Content Area	% of Total	Reference
General Requirements	28%	2009 <i>International Fuel Gas Code</i> ®
Appliances and Equipment	20%	
Fuel Supply Systems	22%	
Combustion Air	10%	
Chimneys and Vents	12%	
Special Requirements	8%	
Total	100%	