

# West Virginia Contractor Licensing Board **Candidate Information Bulletin**



## FREQUENTLY ASKED QUESTIONS

- 1. How DO I REGISTER TO TEST? To register and schedule for testing, go to https://www.provexam.com/register. You may also call us at 866-720-7768. Click here for more information about registering.
- 2. WHERE CAN I TEST? You may test at any one of Prov's testing centers throughout the United States. Click here for a current list of our West Virginia based testing centers. You may also test using **Examroom**, which is a "test at home" service. You can test Monday

through Friday, 8 am until 10 pm using your own computer. To learn more, click here.

- 3. How MUCH DOES IT COST? Exams costs \$59.95 whether testing for the first time or retaking an exam.
- 4. WHAT SHOULD I HAVE WITH ME ON TEST DAY? Make sure you have your valid **Photo ID** and any permitted reference manuals to use during testing.

Note: From September 1, 2024, through March 31, 2025, you may use any reference manual recommended for use for your specific examination by the prior testing vendor. On April 1, 2025 and thereafter, only books recommended by Prov will be permitted during the examination. These books are listed at the end of this bulletin under the title Alternate Book List.

- 5. WHEN DO I GET MY TEST RESULTS? Exam results are available at the testing center once you complete vour exam.
- 6. ARE THERE ANY STUDY AIDS? Yes, in our bookstore we sell practice examinations to help you prepare for your test.
- 7. WHAT IS ON THE TEST? Click here for information about the available examinations. Please read through this bulletin completely for answers to your questions.

If you still have unanswered questions, you may contact us at the following:

For Licensing Questions -WV Contractor Licensing 1900 Kanawha Blvd East State Capitol Complex Building 3, Room 200 Charleston, WV 25305 Phone: 304-558-7890 Fax: 304-558-5174 Office Hours: 8 a.m. - 5 p.m.

For Testing Questions -Prov 150 W Civic Center Drive Suite 601 Sandy, Utah 84070 (866) 720-7768 www.provexam.com

Call Center Hours: M-F 8 a.m. – Midnight ET

https://wvclboard.wv.gov/

## **GENERAL TESTING INFORMATION**

The West Virginia Contractor Licensing Board (Board), with administrative and enforcement assistance by the West Virginia Division of Labor, oversees the licensing process for contractors. The Board has contracted with Prov, Inc. to develop and administer its licensing examination program for contractors. This bulletin has been developed to help explain the rules and processes candidates will need to undertake to complete the testing requirement for their contractor license.

West Virginia law requires that each business operating in the construction industry be licensed. To become licensed, a company representative must demonstrate competency by passing the required exam(s) in the field of construction for which licensure is being sought. A company can have multiple qualifiers. However, backups are not allowed.

Board regulations require that qualifying individual(s) taking an exam be part of responsible management or a full-time employee of the entity seeking licensure.

Prov is not authorized to make the determination of which examination(s) candidates must take. If a candidate is unsure which exam is needed for the license being sought, resolve this question before registering. If candidates have questions regarding which exam(s) to take, email the Board at clboard@wv.gov. If candidates take the wrong exam, the exam fee will not be refunded.

## EXAMS AND FEES

All examinations for the State of West Virginia Contractor Licensing Board are delivered in computerized format. All examinations cost **\$59.95** each, whether taking for the first time or retaking. The following are available exams:

- Business & Law\*
- Concrete Contractor
- Electrical Contractor
- Excavation Contractor
- General Building Contractor
- General Engineering Contractor
- Heating, Ventilating & Cooling Contractor
- Manufactured Home Installation Contractor
- Masonry Contractor
- Multifamily Contractor
- Piping Contractor
- Plumbing Contractor
- Remodeling & Repair Contractor
- Residential Contractor
- Sprinklers & Fire Protection Contractor
- Steel Erection Contractor
- Utilities (Water & Sewer) Contractor

\*Note: Those seeking licensure as a contractor are required to pass the Business and Law exam in addition to the trade exams, if applicable.

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#### TESTING WITH PROV

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

The following link will take you to a short video that demonstrates Prov's testing system: <u>https://youtu.be/h3T9svnIdLY</u>.

#### WHERE TO TAKE YOUR EXAM

You may take your examination at any of Prov's testing facilities throughout the United States. Prov has four (4) West Virginia-based testing centers where candidates can take their examinations. These testing centers are located in the following cities:

- Charleston
- Martinsburg
- Morgantown
- Wheeling

You may also schedule to take your test at home using the Examroom.ai remote proctoring service.

#### HOW TO SCHEDULE ONLINE

1. To schedule your test, navigate to the following URL:

## https://provexam.com/scheduler

- 2. Select SELF REGISTRATION.
- 3. Use the Dropdown menu under "Select Certifying Body", and select:

## West Virginia Contractor Licensing

- 4. Under "Select a License/certificate", choose the license you are seeking.
- 5. Enter the following information into the fields that are provided.
  - Name (First and Last) •
  - Social Security Number (SSN)
  - Street address •
  - City, State, Postal Code •
  - **Email Address**
  - **Telephone Number** •

Then select the button labeled:

6. Select a Date, Time, Location for your exam by selecting the link labeled:



Find suitable time and venue

Save Changes

- 7. Select the SCHEDULE hyperlink to check the calendar for the testing center.
- 8. Select a test **date** and **time** from the calendar that matches your schedule. Confirm your selected date and time, and select Add to Cart.
- 9. Proceed to payment. If you have provided an email address, the invoice for your exam payment will be automatically emailed to you.

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

## SCHEDULING BY PHONE

To schedule for an examination by phone, candidates should contact Prov at 866-720-7768. Prov's office is available for scheduling from 8 a.m. through midnight, Monday through Friday.

Candidates should be prepared to provide the Prov scheduling staff with their name, driver's license number and their address. Once Prov confirms the candidate's identity, Prov staff will search the database for the next available testing session at the candidate's preferred testing location and will provide candidates with any alternate locations that may be in close proximity to their address. Once candidates are scheduled, Prov staff will email them information regarding their testing schedule.

#### **CANCEL/RESCHEDULING POLICY**

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

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

## PREPARING FOR YOUR EXAMS

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

Prov recommends that you prepare for your exam by familiarizing yourself with the subject areas listed in each exam description. Additionally, familiarize yourself with the reference materials that are allowed during the examination. The more time you spend outside of the testing room studying, the less time you will need to spend in the testing room trying to location information.

You are encouraged to prepare our test materials by highlighting text or placing permanent tabs on important pages.

## PURCHASING REFERENCE MATERIALS & STUDY GUIDES

When preparing the exams for the State of West Virginia, Prov identified the appropriate reference sources where the answers were to be located. Prov does not require that you bring in the references, but, the examinations are delivered in an Open Book format. Below the description of each examination have listed the various reference book's including the ISBNs for each book so that you may purchase them in advance of the test. We have also provided the number or percent of questions found in each book so that you may determine whether the use of the book justifies the associated cost.

Most reference books can be purchased by phone or online through the following companies. Shipping charges will apply. Brick and mortar locations are indicated, but candidates should call to verify that orders are ready for pickup. Many of the books for your examination are available from Prov using the following information.

## Prov Bookstore

150 West Civic Center Drive, Suite 601 Sandy, Utah 84070 <u>https://www.provexam.com/bookstore/</u> Toll Free: 866-720-7768

Books also available from the following book vendors.

- @ Home Prep, Inc.
   900 East Hill Ave., Ste. 380, Knoxville, TN 37915
   www.contractor-licensing.com
   800-952-0910
- AAA Construction School, Inc.
   34 Arlington Road South, Jacksonville, FL 32216
   www.aaaconstructionschool.com
   800-741-7277 or 904-722-9994
- American Contractors Exam Services
   737 Southern Hwy., Mineral Wells, WV 26150
   www.examprep.org
   800-992-1910
- Builder's Book Depot

   1001 East Jefferson Rd., Ste., 5, Phoenix, AZ
   85034
   www.buildersbookdepot.com

800-284-3434 or 602-252-4050

- International Code Council
   900 Montclair Rd., Birmingham, AL 35213
   4051 Flossmoor Rd., Country Club Hills, IL 60478
   www.iccsafe.org
   800-786-4452
- My Pearson Bookstore <u>http://www.mypearsonstore.com</u> 800-947-7700 (Opt. 5) North American Contractors Assoc. <u>www.infonaca.com</u> 336-540-0149

If candidates need assistance in ordering any study materials, they may contact Prov by phone at 866-720-7768.

#### TEST DAY RULES AND PROCEDURES

## Check-in Deadline

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

## **Proof of Identity**

Upon arriving at the testing center, you will be required to show government-issued, photo-bearing identification. The photo-bearing ID must be current and valid. Forms of valid photo-bearing ID are a driver's license, passport, or military ID.

You will also be required to sign a test center log and will be photographed by the test center staff. If you cannot produce a valid government-issued photo ID, refuse to participate in signing the test center log, or refuse to be photographed, you will be dismissed from the testing center and forfeit all testing fees for that testing session.

If you do not have a photo ID, you may still present a valid State driver's license without a photo, a State ID card without a photo that is issued by the DMV, or a birth certificate.

## **Prohibited Items**

No cameras, recorders, cell phones or other communication devices are allowed in the testing room. Talking and smoking are not allowed in the testing room.

## Approved Items

You may bring the following approved items into the testing center:

- Pencils. (Paper/pencil testing only)
- **Calculator**. Only simple 4-function calculators are permitted. PDAs, tablets, cell phones or other special calculators are NOT permitted.
- Approved **References**. (Refer to the exam information for the specific references permitted for the exams)

## **Reference Material Rules**

All examinations are designed to allow you to use

**authorized** references while taking their exams. For a list of what reference materials are authorized for the exams, please refer to the exam description for the candidate's exam. All reference materials will be checked by the Prov test administrator prior to the candidates being permitted access to the testing room.

For all references, you are permitted to use any version (older or newer) of the same code or reference. Please know that the test will be based on the reference version shown in this bulletin. If there are conflicts between the current version and the different version, the exam will be scored based on the current version.

**Reference Material Note:** Prov will permit you to bring in any reference book previously allowed by PSI from September 1, 2024 through March 31, 2025. Prov does not guarantee that the answers to the questions will be found in the PSI books (except for the Code books), but, these will be permitted during this timeframe.

You should prepare your reference materials using ONLY the following methods.

- Highlighting
- Attaching permanent tabs

Reference materials which do not meet the following guidelines will not be allowed in the testing room.

These guidelines are in place to ensure that every candidate is tested fairly, and that no candidate has access to unapproved resources.

- Handwritten notes are NOT allowed in any portion of a reference book and will need to be erased prior to using the materials.
- Moveable tabs are NEVER permitted in a reference book.
- A reference book CANNOT contain Post-it notes.
- Photocopied documents CANNOT be added to a reference book.
- Photocopied versions of a reference book are NEVER permitted.
- Test preparation study guides are NOT approved references and are NOT permitted in the testing center; this includes practice examinations.

We ask that you leave all unauthorized materials in your car or vehicle. If you are caught using unauthorized materials during testing, these materials will be confiscated, your testing will be terminated with fees forfeited, and the Department will be notified of your dismissal from the exam. During the testing process you MAY NOT:

- Share reference materials during testing.
- Highlight, underline, mark or write any kind of information in their reference materials during testing.

## Visitor Policy

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

## **Unethical Conduct Policy**

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

## **RESULTS REPORTING**

Upon completion of an examination, your test will be scored, and you will be provided with a score result while at the testing center. There is no charge for the on-site scoring. The State will be notified of your results automatically. All exams will be scored and graded against a cut-score of 70%. Those achieving a score of 70% or higher will receive a passing grade on that exam.

## RETESTING POLICY

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

## Reviews

Reviews are intended to help candidates audit their testing results by allowing them to see which questions were missed during testing.

You may request a review of your exam only after failing an exam category a minimum of two (2) times. To be eligible for a review, you must score within 10 points of the required 70% passing score. The review for all tests is 1-1/2 hours in length. During the review you will be provided a printout of the questions you missed on your most recent examination. Additionally you will receive the answers you chose for those questions. The review will be conducted under the same testing conditions as the exam using the same test security rules.

The cost of the review is the same as the exam fees and based on when you wish to review your test. Candidates will request or schedule a review using the same methods described earlier for scheduling.

## EXAM CHALLENGE PROCESS

If during an exam or review, candidates encounter a question they think is inaccurate or otherwise incorrect, they are encouraged to submit an Exam Comment form to Prov detailing why they feel the question is in error.

Candidates testing on computer may make their comments in the testing system, while those taking a paper/pencil format exam may submit comments on a comment form that can be obtained from the test proctor at the testing center.

Candidates who are reviewing an exam will automatically be provided with an Exam Comment form.

Prov staff will review each comment within two weeks of receipt by Prov and will make scoring adjustments should any comment result in a change to a test question.

#### HAND SCORE REQUEST

Prov ensures the accuracy of our exam results. Our computer system, is designed to identify and report any potential error in data collected from an exam session. If you would like to have your score reassessed for accuracy, you can request a Hand Score by calling Prov at 1-866-720-7768 and asking for a Hand Score Request Form.

A Hand Score Request form requires a signature and must be mailed to Prov. Forms must be received by Prov no later than ninety (90) days after your examination administration date and must be accompanied by a copy of your original score letter.

Once a Hand Score is received, Prov Staff will process the request within seven (7) to ten (10) business days. During the Hand Score process a staff member will ensure that your answers were properly recorded and scored by comparing the captured answers to the exam key. Upon completion of the Hand Score we will provide a letter by mail to report the outcome of the reassessment.

The cost of the hand score is \$25.00 (includes tax).

## PROV'S NON-DISCRIMINATION STATEMENT

Prov provides equal access to its exams and testing programs for all eligible persons. Although individual jurisdictions that Prov represents are wholly responsible for determining eligibility of candidates, it is the policy of Prov to maintain an environment free of discrimination and to prohibit discrimination and harassment against any person on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and veteran, marital or family status. Harassment of Prov program participants, proctors, staff or candidates will not be tolerated. If candidates wish to express concerns about discrimination, they should contact Prov at 866-720-7768 or write to: Prov, Inc., 150 W Civic Center Drive, Suite 601, Sandy, Utah 84070.

## SPECIAL ACCOMMODATIONS

Prov complies with the Americans with Disabilities Act (ADA) in providing special accommodations for candidates that require additional assistance during the testing process. If candidates feel that they qualify for a special accommodation during testing, they should contact Prov at (866) 720-7768. Prov will require written documentation from a licensed physician or psychologist documenting the disability and further require a request describing the requested remedy. Prov will then work directly with the candidates to make the accommodations they will need in order to complete their examination.

## SAMPLE TEST QUESTIONS

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

- Employers are required to notify employees of changes in policies affecting all of the following EXCEPT:
  - a. Pay schedules.
  - b. Vacation allowance.
  - c. Health benefits.
  - d. Promotion opportunities.
- The accounting method that recognizes income and expenses only when money is received or paid is called:
  - a. PCM Method.
  - b. Accrual Method.
  - c. Cash Method.
  - d. Cost-Comparison Method.
- 3. If 15 amp circuits were used, the NEC would require a 2000 square foot house to have a MINIMUM of how many branch circuits?
  - a. 2
  - b. 3
  - c. 4
  - d. 5
- 4. Equipment that is electrically connected to a telecommunications network is required to be listed in accordance with section \_\_\_\_\_ of the NEC.
  - a. 110.16
  - b. 240.6
  - c. 800.18
  - d. Chapter 9, Table 5(A)
- 5. Duct systems installed in single family dwellings must be sized per
  - a. ACCA Manual D.
  - b. ACCA Manual J.
  - c. SMACNA Manual R.
  - d. SMACNA Manual N.
- 6. What is the recommended MAXIMUM spacing of nails when installing drywall on a ceiling?
  - a. 6" o.c.
  - b. 7" o.c.
  - c. 8" o.c.
  - d. 12" o.c.

- 7. Which of the following types of joint reinforcement is NOT used to tie connecting cavity walls and intersecting walls?
  - a. Z-tie
  - b. Box tie
  - c. Hardware cloth
  - d. Ladder type joint reinforcement
- 8. What is the recommended concrete cover over #6 steel reinforcing in areas exposed to the weather?
  - a. 3"
  - b. 2"
  - c. 1.5"
  - d. 1"

## ANSWERS TO SAMPLE QUESTIONS

- 1. D Promotion opportunities.
- 2. C Cash Method.
- 3. C-4
- 4. C 800.18
- 5. A ACCA Manual D.
- 6. B 7" o.c.
- 7. D Ladder type joint reinforcement
- 8. B-2"

## EXAM TEST SITE AVAILABILITY

You may take the exams at any one of Prov's testing centers located in the United States including any of the four (4) testing locations within West Virginia. You can also take the exams at home using Prov's Examroom<sup>®</sup> service.

## What is Examroom?

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

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

- Operating system on computer needs to be recent (less than 3-4 years old)
- Works on a MAC, PC, or Chromebook
- Need either a Chrome or Firefox browser (Chrome works best)
- Need a functioning computer web-camera and microphone
- Need a good consistent Internet connection capable of **uploading** files in excess of 3 Mbps

Please use the following link to do a system check **before you schedule** the exam to make sure your computer system will support testing using the Examroom Service.

## https://examroom.ai/systemtest/

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

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

## EXAM DESCRIPTIONS

The following are descriptions of the licensing examinations offered on behalf of the West Virginia Contractor's Licensing Board. Please check with the State to determine which categories are necessary for the type of work you will perform.

Each description includes the number of questions per test, the time allowed, as well as a detailed description of the topics and numbers of questions per topic that will be included on your test. Following each description will be a list of the references Prov used to create each examination. You are permitted to bring in each of the listed references for your specific examination. Additionally, you are permitted to bring in older versions of each reference OR you may bring in the references related to the same examinations when provided by the prior testing vendor (until spring 2025). Please see the Alternate Book List at the end of this Candidate Bulletin for the list of additional books.

## EXAMINATION DESCRIPTIONS

The State of West Virginia requires all Contractors to take and pass the Business and Law exam in addition to the trade exams, if applicable. The following are descriptions of each of the possible exams administered on behalf of the Contractor Licensing Board.

## **BUSINESS AND LAW**

This exam covers basic business management skills necessary to run a construction business. It also addresses the legal requirements of establishing a business including taxes, laws, and regulations governing construction.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Business Organization	2
Contracts	8
Estimating and Bidding	4
Financial Management	5
Labor Law	8
Licensing	4
Lien Law	2
Project Management	6
Risk Management	3
Safety-OSHA	3
Tax Law	5

#### References

West Virginia Business and Law Study Guide for Contractors, 6th Edition, 6th edition, updated August 2024. Prov Bookstore, 150 W Civic Center Drive, Suite 601, Sandy, UT 84070. https://provexam.com/bookstore/ 100% of the questions come from this book

## CONCRETE

"Concrete Contractor" means a contractor whose primary business is installation and repair of concrete, concrete reinforcing materials, concrete products and accessories common to the industry, including the forming, pouring, and finishing of concrete structures such as footings, foundations, slabs, basements, sidewalks and walkways, driveways and parking areas, fence footings, decorative concrete walls not to exceed four (4) feet in height and retaining walls not to exceed five (5) feet in height and the excavation incidental to the performance of that work.

Number of Questions Time allowed (hours)	50 3
Subject Area	# Quest.
Plan Reading and Estimation	6
Properties of Concrete	4
Concrete Tools and Equipment	2
Formwork	6
Reinforcement of Concrete	8
Preparation for Placement	6
Placement and Finishing	6
Quality Control and Curing	4
Specialized Installations and Finishes	3
Concrete Safety	5

**Concrete Construction Level 1,** 2021. ISBN: 978-0-13-686828-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn =0136868282 https://provexam.com/bookstore/ 25% of the questions come from this book

**Concrete Construction Level 2**, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn =0136898327 https://provexam.com/bookstore/ 23% of the questions come from this book

**Contractor's Guide to Quality Concrete Construction**, 4th. ISBN: 9781641950473. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. https://www.concrete.org/store/productdetail.aspx?ltemID=MNL519 & amp;Language=English&Units=US\_Units 43% of the questions come from this book

International Building Code, 2018.ISBN: 978-1-60983-735-8.International Code Council, 4051 West Flossmoor Road, Country ClubHills,IL60478.Availableat@iccsafe.org.https://provexam.com/bookstore/43% of the questions come fromthis book

## ELECTRICAL

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

Number of Questions	75
Time allowed (hours)	3

Subject Area	# Quest.
Communication Systems	3
Equipment for General Use	6
General Electrical Knowledge	12
Motors & Controls	5
Plan Reading	2
Special Conditions	4
Special Equipment	4
Special Occupancies	2
Wiring & Protection	17
Wiring Methods & Materials	20

#### References

American Electrician's Handbook, 17th Edition.ISBN: 978-1260457919.McGraw Hill Publishing Inc., P.O. Box 182604,Columbus,OH43272.Availableathttps://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa30% of the questions comefrom this book

**NFPA 70 - National Electrical Code 2020**, ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. **70%** of the questions come from this book

#### **EXCAVATION**

"Excavation Contractor" means a contractor whose primary business is the installation, alteration, and repair of earthen material by digging, trenching, grading, or compacting the material for a cut, fill, grade, or trench and work incidental to the undertaking, including the installation, alteration, and repair of crib walls, gabion walls, and other devices not to exceed six (6) feet in height for the purpose of controlling the movement of earthen materials.

Number of Questions Time allowed (hours)	50 3
Subject Area	# Quest
General Knowledge	5
Survey & Layout	5
Excavation	5
Clearing & Grubbing	5
Dewatering	5
Grading	8
Safety	6
Estimating & Plan Reading	6
Equipment	5

References

International Building Code,2018.ISBN:978-1-60983-735-8.International Code Council,4051 West Flossmoor Road,Country Club Hills,IL 60478.Available at @iccsafe.org.https://provexam.com/bookstore/18% of the questions come from this book

**Study Guide for Excavation Contractors**, 3rd edition, 2024. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com **82%** of the guestions come from this book

#### **GENERAL BUILDING**

"General Building Contractor" means a person whose principal business is in connection with any structures built, being built or to be built for the support, shelter and enclosure of persons, animals, chattels or movable property of any kind, requiring in the construction the use of more than two contractor classifications, or a person who supervises the whole or any part of the construction. A General Building Contractor is considered to be a commercial, business or industrial contractor. A General Building Contractor who desires to perform electrical, plumbing, heating, ventilating and cooling, piping, or general engineering contracting work as defined in this rule; shall obtain a license in those classifications. The General Building Contractor classification applies to work on both commercial and private properties.

Number of Questions	80
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading and Estimating	8
Sitework	8
Concrete	12
Masonry	8

Structural Steel	12
Carpentry	8
Roofing	4
Doors and Windows & Stairs	4
Interior Finish	4
Exterior Finish	4
Safety-OSHA	8

Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=01 36898327 https://provexam.com/bookstore/ 4% of the questions come from this book

International Building Code,2018.ISBN:978-1-60983-735-8.International Code Council,4051 West Flossmoor Road, Country Club Hills,IL 60478.Available at @iccsafe.org.https://provexam.com/bookstore/64% of the questions come from this book

Study Guide for Commercial Building Contractor, 2024.Pearson, 501Boylston Street, Suite 900, Boston, MA 02116.Available athttps://provexam.com/bookstore/26% of the questions come fromthis book

Study Guide for Structural Steel, 2012. ISBN: 978-1-269-08432-1. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com 10% of the questions come from this book

#### **GENERAL ENGINEERING**

"General Engineering Contractor" means a person whose principal business is in connection with public or private works projects, including, but not limited to, one or more of the following: irrigation, drainage and water supply projects; electrical generation projects; swimming pools; flood control; harbors; railroads; highways; tunnels; airports and airways; sewers and sewage disposal systems; bridges; inland waterways; pipelines for transmission of petroleum and other liquid or gaseous substances; refineries; chemical plants and other industrial plants requiring a specialized engineering knowledge and skill; piers and foundations; and structures or work incidental thereto. "Swimming pool" means a public swimming pool as defined by the Building Officials and Code Administrators B.O.C.A. National Building Code 1990, article 6, section 623.2.A.

Number of Questions Time allowed (hours)	80 3
Subject Area Sitework Excavation Foundation Concrete Steel Utilities Paving Safety-OSHA	# Quest. 8 6 10 14 14 4 6
Estimating and Plan Reading	12

#### References

International Building Code,2018.ISBN:978-1-60983-735-8.International Code Council, 4051 West Flossmoor Road, Country Club Hills,IL 60478.Available at @iccsafe.org.https://provexam.com/bookstore/29% of the questions come from this book

**Study Guide for General Engineering**, 3rd edition, 2014. ISBN: 978-1-269-78657-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com **71%** of the questions come from this book

#### **HVAC**

"Heating, Ventilating and Cooling Contractor" means a person who engages in the business of contracting to install, erect, repair, service or alter heating, ventilating and air conditioning equipment or systems to heat, cool or ventilate residential and commercial structures or work incidental to the installation or repair.

Number of Questions	80
Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	30
Load Calculations	6
Code Requirements	4
Controls	10
Ducting, Insulation	10
Piping	6
Safety - OSHA	4
Equipment	10

References

**HVAC Basics for Contractors**,3rd Edition, 3rd Edition. ISBN: 13:9781323725146. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com. **14%** of the questions come from this book

International Mechanical Code 2021. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available at https://codes.iccsafe.org/ 70% of the questions come from this book

SMACNA-Residential Comfort System Installation Standards Manual, 2016. Sheet Metal and Air Conditioning Contractors National Association, 4201 Lafayette Center Drive, Chantilly, VA 20151-1209. 14% of the questions come from this book

#### MANUFACTURED HOME INSTALLATION

"Manufactured Home Installation Contractor" means a contractor engaged in the installation of manufactured homes, as that term is defined by W. Va. Code 21-9-1, including soil analysis, site preparation, construction of the foundation systems, placement of the manufactured home, connection of the utilities, anchoring, ground moisture control, and finish carpentry. Possession of this license is in addition to possession of any license required pursuant to W. VA. Code 21-9-1

Number of Questions	65
Time allowed (hours)	3

Subject Area	# Quest.
Anchors & Tie Downs	12
Connections	3
Footing & Foundations	12
Placement	3
Plan Reading & Estimating	3
Sitework	6
Skirting & Ventilation	8
Support & Leveling	12
Manufactured Home Administration	6

24CFR3285 Model Manufactured Home Installation Standards. (73 pages) Document can be printed out and used during testing. Must have a hardcopy of this document; will not be able to access online during testing. https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3285 83% of the questions come from this book

#### West Virginia Manufactured Housing Construction and Safety Standards

Act. WV - West Virginia Contractor's Licensing Board, 1900 Kanawha Blvd E, State Capitol Complex Bldg 3, Room 200, Charleston, WV 25305. Available at

www.legis.state.wv.us/WVCODE/Code.cfm?chap=21&art=9. Chapter 21 Article 9 9% of the questions come from this book

#### MASONRY

"Masonry (specialty) Contractor" means a contractor whose primary business is the installation of brick, concrete block, stone, marble, slate or other units and products common to the masonry industry, with or without mortar and work incidental to the installation, including the installation of grout, caulking, tuck pointing, sand blasting, mortar washing, parging, cleaning, and welding of reinforcement steel related to masonry construction.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading and Estimating	5
Concrete Block	12
Brick	11
Stone	3
Glass Block	5
Mortar	6
Steel Reinforcement	3
Safety-CFR	5

References

International Building Code, 2021. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://codes.iccsafe.org/ 40% of the questions come from this book

**Study Guide for Masonry Contractors**, 2nd Edition, 2014. ISBN: 978-1-269-78558-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com. **60%** of the questions come from this book

## MULTIFAMILY

"Multifamily Contractor" means a person who is engaged in the construction, repair or improvement of a multifamily residential

structure or work incidental to the construction, maintenance or repair. Multifamily residential structure means a structure containing two or more residential units.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading	9
Sitework	6
Concrete	9
Masonry	8
Structural Steel	4
Carpentry	15
Roofing, Siding, and Insulation	6
Doors and Windows	6
Interior Finish	3
Safety-OSHA	6
Exterior Finishes	3

References

International Building Code, 2021. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://codes.iccsafe.org/ 76% of the questions come from this book

Study Guide for Commercial Carpentry, 2nd Edition, 2014.Pearson, 501Boylston Street, Suite 900, Boston, MA 02116.21% of the questionscome from this book21% of the questions

**Study Guide for Structural Steel,** 2012. ISBN: 978-1-269-08432-1. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com **2%** of the questions come from this book

#### **PIPING**

"Piping Contractor" means a person whose principal business is the installation of process, power plant, air, oil, gasoline, chemical or other kinds of piping; and boilers and pressure vessels using joining methods of thread, weld, solvent weld or mechanical methods or work incidental to the installation

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
General Regulations	20
Weld Pipe Fabrication	10
Underground Piping	8
Safety	6
Piping Systems	6

References

Pipefitting Level Two, 2019.Pearson, 501 Boylston Street, Suite 900,Boston,MA02116.Availableathttp://nccer.pearsonconstructionbooks.com.10% of the questionscome from this book

Pipefitting Level Three,2019.Pearson,501 Boylston Street,Suite 900,Boston,MA02116.Availableat

http://nccer.pearsonconstructionbooks.com. **42%** of the questions come from this book

Pipefitting Level Four,2019.Pearson,501 Boylston Street,Suite900,Boston,MA02116.Availableathttp://nccer.pearsonconstructionbooks.com.32% of the questionscome from this book

**Basic Safety.** ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com. **10%** of the questions come from this book

#### PLUMBING

Master Plumber means a person whose principal business is the installation, maintenance, extension and alteration of piping, plumbing fixtures, plumbing appliances and plumbing appurtenances, venting systems and public or private water supply systems within or adjacent to any building or structure; including the installation of gas piping, chilled water piping in connection with refrigeration processes and comfort cooling, hot water piping in connection with building heating, piping for stand pipes or work incidental to the installation

Number of Questions	100
Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	10
Fixtures & Fittings	6
Storm Drainage	5
Fuel Gas Systems	10
Safety	7
Isometrics	13
Water Supply and Distribution	14
Water Heaters	7
Drain, Waste and Vent Systems	14
Plumbing Math	9
Plumbing Tools	5

#### References

International Fuel Gas Code - 2018. ISBN: 978-1-60983-741-9. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. available @iccsafe.org OR at https://provexam.com/bookstore/ 10% of the questions come from this book

InternationalPlumbingCode2018.ISBN:978-1-60983-745-7.International Code Council, 4051West Flossmoor Road, Country Club Hills,IL 60478.available @iccsafe.org OR at https://provexam.com/bookstore/53% of the questions come from this book

Plumbing Basics for Contractors, 3rd Edition, 2014. ISBN: 978-1-269-78624-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com 37% of the questions come from this book

#### **REMODELING AND REPAIR**

"Remodeling and Repair" allows the license holder to engage in general remodeling, additions, and repairs to existing structures. This includes all rough and finish carpentry work, the installation of related hardware and accessories, and all minor repairs and

replacements of pre-manufactured items. The scope of work is limited to projects where the cost does not exceed \$40,000.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Planning and Estimating	5
Sitework	4
Concrete	5
Masonry	5
Carpentry	10
Roofing, Siding & Insulation	6
Doors & Windows & Stairs	5
Finishes	5
Safety	5

References

International Residential Code, 2018. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available @iccsafe.org OR at https://provexam.com/bookstore/ 56% of the questions come from this book

Masonry and Sitework for the Residential Contractor, 2nd edition, 2nd. ISBN: 978-1-269-78556-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com 6% of the questions come from this book

Study Guide for Residential Carpentry and Repair, 2nd edition, 2014.ISBN: 978-1-269-78561-7.Pearson, 501 Boylston Street, Suite 900,Boston, MA 02116.Available at www.provbookstore.com36% of thequestions come from this book

## RESIDENTIAL

"Residential Contractor" means a person whose principal business is in connection with the construction, repair or improvement of real property used as, or intended to be used for, residential occupancy or work incidental to the construction or repair. A Residential Contractor is considered licensed for all crafts required in the construction, repair or improvement of a residential structure, as that term is defined in subsection 3.33 of this rule, except those crafts for which local ordinance or state law other than W. VA. Code 21-11-1, et seq, require licensure, such as the electrician's license required by the office of the State Fire Marshall under the provisions of W. VA. Code 29-3b-1, et seq.

Number of Questions Time allowed (hours)	60 3
Subject Area	# Quest.
Plan Reading	9
Sitework	6
Concrete	9
Masonry	9
Carpentry	15
Interior Finish	3
Exterior Finish	3
Safety OSHA	6

International Residential Code, 2018. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available @iccsafe.org OR at https://provexam.com/bookstore/ 40% of the questions come from this book

Masonry and Sitework for the Residential Contractor, 2nd edition, 2nd.ISBN: 978-1-269-78556-3.Pearson, 501 Boylston Street, Suite 900,Boston, MA 02116.Available at www.provbookstore.com25% of thequestions come from this book25% of the

Study Guide for Residential Carpentry and Repair, 2nd edition, 2014.ISBN: 978-1-269-78561-7.Pearson, 501 Boylston Street, Suite 900,Boston, MA 02116.Available at www.provbookstore.com38% of thequestions come from this book

#### **SPRINKLERS & FIRE PROTECTION**

"Sprinklers and Fire Protection Contractor" means a contractor engaged in the installation, repair or maintenance of fire suppression systems, including water sprinkler and chemical systems, and work incidental to the installation or repair.

Number of Questions	80
Time allowed (hours)	3
Subject Area	# Quest.
Code and General Knowledge	8
Sprinkler Systems	36
Water Supply, Storage and Distribution	12
Materials and Methods	8
Private Hydrants and Stand Pipe Systems	8
Commercial Kitchen Equipment	8

#### References

**NFPA 10** - Standard for Portable Fire Extinguishers, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. **3%** of the questions come from this book

**NFPA 13** - Standard for the Installation of Sprinkler Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. **61%** of the questions come from this book

NFPA 13D - Standard for the Installation of Sprinkler Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. 6% of the questions come from this book

**NFPA 13R** - Standard for the Installation of Sprinkler Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. **24%** of the questions come from this book

NFPA 14 - Standard for the Installation of Standpipe and Hose Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. 10% of the questions come from this book

**NFPA 17** - Standard for Wet Chemical Extinguishing Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. **1%** of the questions come from this book

NFPA 24 - Standard for Installation of Private Fire Service Mains and Their Appurtenances, 2013. National Fire Protection Association, 1
Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
3% of the questions come from this book

**NFPA 96** - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2014. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. **8%** of the questions come from this book

#### STRUCTURAL STEEL ERECTION

"Structural Steel Erection Contractor" means a contractor engaged in the erection of structural steel connected, attached or joined by riveting, welding, rigging, or fastening devices, for buildings and other structures, and work incidental to the erection.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	5
Structural Steel	10
Welding & Cutting	6
Structural Steel Bolting	4
Metal Decking	6
Metal Siding	3
Metal Joists	5
Rigging & Cranes	6
Safety - OSHA	5

#### References

International Building Code,2018.ISBN:978-1-60983-735-8.International Code Council,4051 West Flossmoor Road, Country Club Hills,IL 60478.Available at @iccsafe.org.https://provexam.com/bookstore/24% of the questions come from this book

Ironworking Level One, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com. **50%** of the questions come from this book

Ironworking Level Two, 2011. ISBN: 978-0-13-257822-6. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com. 16% of the questions come from this book

Ironworking Level Three, 2012. ISBN: 978-0-13-257785-4. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com. 10% of the questions come from this book

#### **UTILITIES (WATER & SEWER)**

"Utilities (Water & Sewer) Contractor" means a person who principal business is in the installation of water and sewer lines on private projects and work incidental to the installation. The "utilities (Water & Sewer) Contractor" classification applies to work on both commercial and residential properties.

Number of Questions Time allowed (hours)	50 3
Subject Area	# Quest.
Utilities Sitework	8
Excavation	9
Water Piping	9
Sewer Piping	8
Estimating and Plan Reading	9
Safety	7

International Building Code,2018.ISBN:978-1-60983-735-8.International Code Council, 4051 West Flossmoor Road, Country Club Hills,IL 60478.Available at @iccsafe.org.https://provexam.com/bookstore/32% of the questions come from this book

Study Guide for Utilities Contractors, 3rd edition, 2024.ISBN:9780137782864.Pearson, 501 Boylston Street, Suite 900, Boston, MA02116.68% of the questions come from this book

# **Prov** Candidate Instructions Handout

Please take a moment to read the following information (front and back). If you have any questions then please let your proctor know. Failure to follow these testing rules can have serious consequences. Be advised, the testing center and testing room may be under video surveillance.

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- Be courteous and do not disturb others.
- After you are seated, follow all the instructions given and verify the information presented to you. This information will include your name, candidate ID, exam name, and occasionally additional testing Materials such as graphics.
- If you leave the testing room during the test, you must notify your proctor and turn in all your testing materials.
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  - NO CELL PHONES
  - NO ELECTRONIC DEVICES
  - NO VISITORS
  - NO CHEATING
  - NO TAKING NOTES
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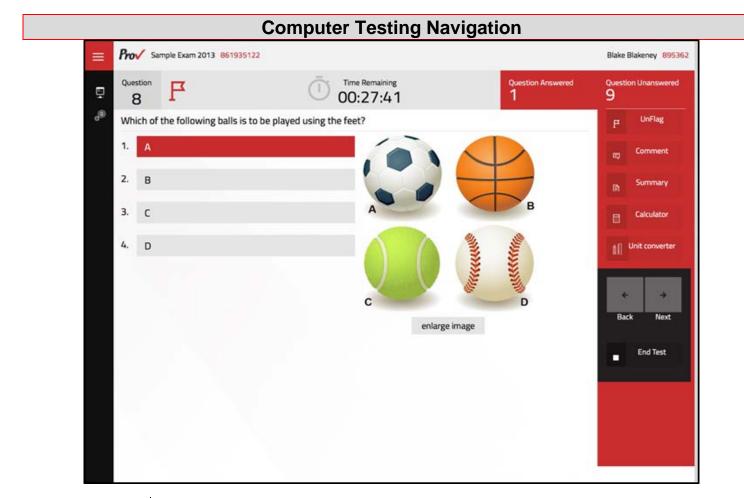
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- Book title must be exact. *Exceptions:* Older/new editions are always permitted. Substitutes are allowed if listed in the Exam Details.
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## **Unethical behavior**

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

In the next few days, Prov will email you a link to our candidate experience survey, please let us know how we did!



Total number of questions	Indicated in the upper right-hand corner of the screen.
Available time	Posted in hours and minutes. The test will end automatically when <b>Time Remaining</b> reaches 0:00.
Selecting your answer	Use your mouse to select a number ( <b>1</b> , <b>2</b> , <b>3</b> , or <b>4</b> ). The answer is highlighted (or checked) when selected. You may change your selected answer for any question until the test is over. If you do not know the answer to a question, it is to your advantage to guess, since there is no penalty for a wrong answer.
Tracking difficult questions	Press the <b>Flag</b> Button to help you keep track of questions you wish to return to at a later time. Flagging questions has no impact in scoring. Press the button again to Unflag the question. You may see which questions have been flagged by clicking <b>Summary</b> .
Question comments	During the assessment, you may find that you have a question or concern about a particular test question. The proctor cannot answer questions about test content at any time; however, you can send a comment to Prov's Test Development Department by clicking the <b>Comment</b> button. Please leave a specific description. Staff will process your comments/questions within two weeks. You can refer to your examination handbook for more information on how comments are processed.
Moving to a different question	Use your mouse to select the <b>Next</b> or <b>Back</b> buttons. Press Next to move forward. Press Back to move backward. You may also use your arrow keys ( $\leftarrow \rightarrow$ ) to move forward and backward through the test.
Reviewing your progress	Press the <b>Summary</b> button to see a table indicating which questions are unanswered or which you have flagged.
Ending the test early	Press <b>End Test</b> button when you are ready to leave the test. It is recommended that you review your exam and verify there are no unanswered questions prior to ending the test.

# ALTERNATE BOOK LIST SEPTEMBER 1, 2024 – MARCH 31, 2025

The following book list may be used as a substitute for the books recommended by Prov. In many cases, such as the Building, Plumbing, Mechanical, and Electrical codes, the books will be the same. The use of these alternate books are the decision of the test taker. However, the new examinations have not been developed to specifically use the references listed below; in other words, there may be some general knowledge questions that may not be answerable through the books on this list. These books are being permitted solely as a convenience to the test takers that may have already purchased study materials for the examinations ending on August 31, 2024. These books will no longer be permitted after March 31, 2025.

## **BUSINESS & LAW**

 NASCLA Contractors Guide to Business, Law and Project Management West Virginia 1st Edition 2022, <u>https://www.psionlinestore.com/</u>

## CONCRETE CONTRACTOR

- International Building Code 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, 2015 ISBN-978-1609834685 2018 ISBN-978-1609837341
- Contractor's Guide to Quality Concrete Construction, 4th Edition, 2018; American Concrete Institute, POB 9094, Farmington Hills, MI 48333 248/848-3700, www.aci-int.org, ISBN-978-1641950473
- Carpentry and Building Construction, 2010 or 2016, John L. Feirer and Mark D. Feirer, McGraw-Hill, https://www.westernerinns.com/carpentry-andbuilding-construction-2016/, 2010 ISBN-978-0078797842 2016 ISBN-978-0021402441

## **ELECTRICAL CONTRACTOR**

- National Electrical Code, NFPA 70, 2017 or 2020, National Fire Protection Association, 1 Batterymarch, Quincy, MA 02269-9101, (617) 770-3000, https://www.amazon.com/NFPA-70-National-ElectricalCode/dp/1455906727, 2017 ISBN-978-1455912797 2020 ISBN-978-1455922970
- American Electricians' Handbook, 16th edition, Croft, Hartwell & Summers, http://www.amazon.com/AmericanElectricians-Handbook-Sixteenth-Edition/dp/0071798803,

## **EXCAVATION CONTRACTOR**

- International Building Code 2015 or 2018, International Code Council, 800-786-4452, https://shop.iccsafe.org/, 2015 ISBN-978-1609834685 2018 ISBN-978-1609837341
- Pipe and Excavation Contracting, Dave Roberts, 1987 or 2011, Craftsman Book Company, (800) 829-8123, www.craftsmanbook.com, 1987 ISBN-978-0934041225 2011 ISBN-978-1572182660

## GENERAL BUILDING

- International Building Code, 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, 2015 ISBN-978-1609834685 2018 ISBN-978-1609837341
- Modern Masonry Brick, Block, Stone, Clois E. Kicklighter, 9th edition (2020). The Goodheart-Willcox Company, (800) 323-0440, www.g-w.com, ISBN-978-1631260957

- Carpentry and Building Construction, 2010 or 2016 (Student Edition), John L. Feirer and Mark D. Feirer, McGraw-Hill, www.mheducation.com, 2010 ISBN-978-0078797842 2016
- Contractor's Guide to Quality Concrete Construction, 4th Edition, 2018; American Concrete Institute, POB 9094, Farmington Hills, MI 43 248/848-3700, <u>www.aci-int.org</u>, ISBN-978-1641950473
- Technical Digest No. 9 Handling and Erection of Steel Joists and Joist Girders, 3rd Edition, 2008, Steel Joint Institute, 234 W. Cheves Street, Florence, SC 29501, Phone: (843) 407-4091, Fax (843) 407-4044, <u>www.steeljoist.org</u>

## **GENERAL ENGINEERING**

- International Building Code 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, 2015 ISBN-978-1609834685 2018 ISBN-978-1609837341
- Technical Digest No. 9 Handling and Erection of Steel Joists and Joist Girders, 3rd Edition, 2008, Steel Joint Institute, 234 W. Cheves Street, Florence, SC 29501, Phone: (843) 407-4091, Fax (843) 407-4044, www.steeljoist.org
- Contractor's Guide to Quality Concrete Construction, 4th Edition, 2018; American Concrete Institute, POB 9094, Farmington Hills, MI 48333 248/848-3700, www.aci-int.org, ISBN-978-1641950473
- Modern Welding, 11th Edition, 2013, Althouse, Turnquist, Bowditch, Bowditch, The Goodheart-Willcox Company, Inc., 18604 West Creek Dr., Tinley Park, IL 60477-6243, 1-800-323- 0440, www.goodheartwillcox.com, ISBN-978-1605257952
- Pipe and Excavation Contracting, Dave Roberts, 1987 or 2011, Craftsman Book Company, (800) 829-8123, www.craftsmanbook.com, 1987 ISBN-978-0934041225 2011 ISBN-978-1572182660

## **HVAC CONTRACTOR**

- International Mechanical Code 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, 2015 ISBN-978-1609834791 2018 ISBN-978-1609837433
- Modern Refrigeration and Air Conditioning, 21st edition, Goodheart-Wilcox Company, www.gw.com, ISBN-978-1635638776
- Manual N Commercial Load Calculation for Small Commercial Buildings, 5th Edition, 2008, Air Conditioning Contractors of America (ACCA), (703) 575-4477, www.acca.org, ISBN-978-1892765383
- HVAC Duct Construction Standards, Metal and Flexible, SMACNA 4th edition, 2020, https://store.smacna.org/hvac-duct-construction-standards-metal-and-flexible-4th/

## **MANUFACTURED HOME INSTALLATION**

• West Virginia Manufactured Home Installer Manual, 2022, A Compilation of the required West Virginia Manufactured Housing Construction and Safety Standards (Chapter 21 and Title 42) and the HUD CFR 24 Parts 3280, 3285, and 3286

## MASONRY CONTRACTOR

- International Building Code, 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, 2015 ISBN-978-1609834685 2018 ISBN-978-1609837341
- Modern Masonry Brick, Block, Stone, Clois E. Kicklighter, 9th edition (2020). The Goodheart-Willcox Company, (800) 323- 0440, www.g-w.com, ISBN-978-1631260957

## MULTI-FAMILY CONTRACTOR

- International Building Code, 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, 2015 ISBN-978-1609834685 2018 ISBN-978-1609837341
- Contractor's Guide to Quality Concrete Construction, 4th Edition, 2018; American Concrete Institute, POB 9094, Farmington Hills, MI 48333 248/848-3700, www.aci-int.org, ISBN-978-1641950473
- Modern Masonry Brick, Block, Stone, Clois E. Kicklighter, 9th edition (2020). The Goodheart-Willcox Company, (800) 323- 0440, www.g-w.com, ISBN-978-1631260957
- Carpentry and Building Construction, 2010 or 2016 (Student Edition), John L. Feirer and Mark D. Feirer, McGraw-Hill, www.mheducation.com, 2010 ISBN-978-0078797842 2016 ISBN-978-0021402441

## PIPING CONTRACTOR

- International Plumbing Code, 2015 or 2018, International Code Council, 800-786-4452, https://shop.iccsafe.org/, 2015 ISBN-978-1609834814 2018 ISBN-978-1609837457
- Pipefitter's Handbook, 1967, 3rd Edition, Forest R. Linsey, Industrial Press, Inc., 200 Madison Avenue, New York, NY 10016, ISBN-978-0831130190
- Pipe Welding Procedures, 1973, H. Rampaul, Industrial Press, Inc., 200 Madison Avenue, New York, NY 10016, ISBN-978-0831111007
- Facility Piping Systems Handbook 3rd Edition, Michael Frankel, McGraw-Hill, ISBN-978-0071597210

## PLUMBING CONTRACTOR

- International Plumbing Code; 2015 or 2018 International Code Council, 800-786-4452, https://shop.iccsafe.org/, 2015 ISBN-978-1609834814 2018 ISBN-978-1609837457
- International Fuel Gas Code 2015 or 2018, International Code Council, 800-786-4452, https://shop.iccsafe.org/, 2015 ISBN-978-1609834777 2018 ISBN-978-1609837419
- Mathematics for Plumbers and Pipefitters, 8th edition, 2013, Delmar Cengage Learning, https://www.cengage.com/c/mathematics-for-plumbers-and-pipefitters-8esmith/9781111642600/. ISBN-978-1111642600

## **REMODELING AND REPAIR**

- International Residential Code for One- and Two-Family Dwellings, 2015 or 2018, International Code Council, (800) 786-4452; 5203 Leesburg Pike, Suite 600 Falls Church, VA 22041, www.intlcode.org/, (2015 ISBN-978-1609834708 2018 ISBN-978-1609837372
- Contractor's Guide to Quality Concrete Construction, 4th Edition, 2018; American Concrete Institute, POB 9094, Farmington Hills, MI 48333 248/848-3700, www.aci-int.org,. ISBN-978-1641950473
- Modern Masonry Brick, Block, Stone, Clois E. Kicklighter, 9th edition (2020). The Goodheart-Willcox Company, (800) 323- 0440, www.g-w.com. ISBN-978-1631260957
- Carpentry and Building Construction, 2010 or 2016 (Student Edition), John L. Feirer and Mark D. Feirer, McGraw-Hill, <u>www.mheducation.com</u>, 2010 ISBN-978-0078797842 2016 ISBN-978-0021402441

## **RESIDENTIAL CONTRACTOR**

- International Residential Code for One- and Two-Family Dwellings, 2015 or 2018, International Code Council, (800) 786-4452; International Code Council, 5203 Leesburg Pike, Suite 600 Falls Church, VA 22041, 7039314533, www.intlcode.org/
- Contractor's Guide to Quality Concrete Construction, 4th Edition, 2018; American Concrete Institute, POB 9094, Farmington Hills, MI 48333 248/848-3700, www.aci-int.org,. ISBN-978-1641950473
- Carpentry and Building Construction, 2010 or 2016 (Student Edition), John L. Feirer and Mark D. Feirer, McGraw-Hill, www.mheducation.com, 2010 ISBN-978-0078797842 2016 ISBN-978-0021402441
- Modern Masonry Brick, Block, Stone, Clois E. Kicklighter, 9th edition (2020). The Goodheart-Willcox Company, (800) 323- 0440, www.g-w.com, ISBN-978-1631260957

## SPRINKLER AND FIRE PROTECTION

- NFPA 13 Standard for the Installation of Sprinkler Systems, 2016. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. ISBN-978-1455911561
- NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2016. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. ISBN-978-1455904563
- NFPA 13R Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies, 2016. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. ISBN-978-1455911585
- NFPA 14 Standard for the Installation of Standpipe and Hose Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. ISBN-978-1455905690
- NFPA 17 Standard for Wet Chemical Extinguishing Systems, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. ISBN-978-1455905706
- NFPA 24 Standard for Installation of Private Fire Service Mains and Their Appurtenances, 2013. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.. ISBN-978-1455904136
- NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2014. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org. ISBN-978-1616650674

## STRUCTURAL STEEL ERECTION CONTRACTOR

- Metal Building Systems Manual, 2018, Metal Building Manufacturers Association (MBMA) and International Code Council (ISBN: 978-1-60983-875-1), https://shop.iccsafe.org/metal-buildingsystems-manual-2018-edition.html, ISBN-978-1609838751
- Modern Welding, 11th Edition, 2013, Althouse, Turnquist, Bowditch, Bowditch, The Goodheart-Willcox Company, Inc., 18604 West Creek Dr., Tinley Park, IL 60477-6243, 1-800-323- 0440, www.goodheartwillcox.com, . ISBN-978-1605257952
- Technical Digest No. 9 Handling and Erection of Steel Joists and Joist Girders, 3rd Edition, 2008, Steel Joint Institute, 234 W. Cheves Street, Florence, SC 29501, Phone: (843) 407-4091, Fax (843) 407-4044, www.steeljoist.org, (27% of questions for this test come from this book).

• SDI (Steel Deck Institute) Manual of Construction with Steel Deck, 2016, 3rd Edition, Publisher-Steel Deck Institute, PO Box 25, Fox River Grove, IL 60021, Phone (847) 458-4647, Fax (847) 458-4648, https://www.sdi.org/publications-2/publications/

## UTILITIES CONTRACTOR

- International Plumbing Code, 2015 or 2018, International Code Council, 800-786-4452, shop.iccsafe.org, . 2015 ISBN-978-1609834814 2018 ISBN-978-1609837457
- Pipe and Excavation Contracting, 2011, Dave Roberts, Craftsman Book Company, P.O. Box 6500, Carlsbad, CA 92018, . ISBN-978-1572182660