



PSI licensure:certification
3210 E Tropicana
Las Vegas, NV 89121
www.psiexams.com

Before paying for
your examination registration,
be sure you understand
the contents of this bulletin.
Please retain and use it as a reference
when contacting PSI.

STATE OF NEVADA CONTRACTORS

“C” CLASSIFICATION EXAMINATIONS

CANDIDATE INFORMATION BULLETIN

Examinations by PSI licensure:certification	1	Required Identification	3
Guidelines for License Application/Qualification.....	1	Security Procedures	3
Examination Registration and Scheduling Procedures	1	Taking the Examination by Computer	3
Fees and Eligibility.....	1	Identification Screen	4
Standard Mail Registration.....	1	Tutorial.....	4
Telephone Registration	2	Examination Question Example.....	4
Fax Registration	2	Pretest Items	4
Internet Registration	2	Examination Review.....	4
Scheduling an Examination	2	Score Reporting	4
Rescheduling an Examination	2	Duplicate Score Reports	4
Canceling an Examination	2	Tips for Preparing for your License Examination	5
Missed Appointment or Late Cancellation.....	2	Reference Sources.....	5
Special Examination Arrangements	2	Examination Content Outlines.....	5
Emergency Examination Center Closing	3	Examination Registration Form.....	End of Bulletin
Examination Site Locations.....	3		
Reporting to the Examination Site	3		

Please refer to our website to check for the most updated information at www.psiexams.com

EXAMINATIONS BY PSI

This Candidate Information Bulletin provides you with information about the examination and application process for becoming licensed as a contractor in the State of Nevada.

Nevada State law requires contractors to be licensed and regulated by the Nevada State Contractors' Board. Eligibility for examination is determined by the Board.

The State Contractors' Board has contracted with PSI licensure:certification (PSI) to conduct its examination program. PSI provides examinations through a network of computer examination centers in Nevada. PSI works closely with the State to be certain that examinations meet local as well as national requirements in basic principles and examination development standards.

HOW TO OBTAIN A LICENSE

1. Please request a license packet by accessing the Nevada State Contractors' Board at www.nscb.state.nv.us. Or you may contact one of the addresses listed below. All questions about applications for licensure should be directed here.

2310 Corporate Circle Suite 200
Henderson, NV 89074
(702) 486-1100

9670 Gateway Dr. #100
Reno, NV 89511-5906
(775) 688-1141

2. If the Board accepts your qualifications to register for an examination, the Board will mail you a Candidate Eligibility letter, along with the Candidate Information Bulletin, which contains the PSI Registration Form and instructions for selecting an examination date.
3. To register for an examination, you must complete the PSI Registration Form and appropriate fee(s) to PSI.

All questions and requests for information about examinations should be directed to PSI.

PSI licensure:certification
3210 E Tropicana
Las Vegas, NV 89121
(800) 733-9267 • Fax (702) 932-2666
www.psiexams.com

4. Upon passing the examination, PSI will forward your results to the Board for processing.

GUIDELINES FOR LICENSE APPLICATION/QUALIFICATION

To make the license examination process go smoothly, be certain that you:

1. Send the PSI Registration Form to PSI along with the correct payment for the examination(s).
2. Prepare for the examination by using the examination content outline and the suggested study materials that cover the outline topics.
3. Be sure to take proper identification with you to your scheduled examination appointment.

EXAMINATION REGISTRATION AND SCHEDULING PROCEDURES

FEES AND ELIGIBILITY

The following fee table lists the applicable fee for each examination. The fee is for each registration, whether you are taking the examination for the first time or repeating. A candidate who tests unsuccessfully must wait **2 weeks** before retaking each portion. If you fail the third time, your application becomes void and you must re-apply directly with the Nevada State Contractors' Board.

EXAMINATION FEES

One Examination Portion	\$85
Two Examination Portions	\$130

NOTE: REGISTRATION FEES ARE NOT REFUNDABLE OR TRANSFERABLE. REGISTRATION FEES WILL EXPIRE ON THE SAME DATE AS YOUR ELIGIBILITY EXPIRATION DATE.

Note: The \$130 fee is only applicable if the 2nd exam is the CMS. If you are taking 2 trades, e.g., C3 and C4, they would be \$85 per exam.

STANDARD MAIL REGISTRATION

1. Complete the PSI registration Form (found at the end of this Candidate Information Bulletin), and appropriate examination fee(s) to PSI. Payment of fees can be made by money order or cashier's check. Money orders or cashier's checks should be made payable to PSI. Print your social security number on your check or money order to ensure that your fees are properly assigned. **CASH, COMPANY CHECKS, PERSONAL CHECKS, MASTERCARD, AND VISA ARE NOT ACCEPTED.**

PSI licensure:certification
3210 E Tropicana
Las Vegas, NV 89121
(800) 733-9267 • Fax (702) 932-2666
www.psiexams.com



BE SURE TO READ ALL DIRECTIONS CAREFULLY BEFORE COMPLETING THE EXAMINATION REGISTRATION FORMS. IMPROPERLY COMPLETED FORMS WILL BE RETURNED TO YOU UNPROCESSED.

2. Please allow 2 weeks to process your Registration before scheduling for your examination.

TELEPHONE REGISTRATION

For telephone registration, you will need a valid VISA or MasterCard.

Complete the Examination Registration Form, including your credit card number and expiration date, so that you will be prepared with all of the information needed to register by telephone.

1. Call (800) 733-9267, 24 hours a day and register using the Automated Registration System. Otherwise, PSI registrars are available Monday through Friday, between 4:30 am and 5:00 pm and Saturday, between 8:00 am and 2:00 pm, Pacific Time, to receive the information listed on your Examination Registration Form and schedule your appointment for the examination.

FAX REGISTRATION

For fax registration, you will need a valid VISA or MasterCard.

Complete the Examination Registration Form, including your credit card number and expiration date.

1. Fax the completed form to PSI (702) 932-2666. Fax registrations are accepted 24 hours a day.
2. Please allow 4 business days to process your registration. After 4 business days, you may call PSI to schedule the examination(s), (800) 733-9267.

INTERNET REGISTRATION

The Examination Registration Form is available at PSI's website, www.psiexams.com. You may register and schedule for an examination via the Internet 24 hours a day.

1. Complete the registration form on line and send it to PSI via the Internet.
2. Upon completion of the online registration form, you will be given the available dates for scheduling your examination.

SCHEDULING AN APPOINTMENT TO TAKE THE EXAMINATION

You are responsible for calling PSI to schedule an appointment to take the examination. PSI will make every effort to schedule the examination site and time that is most convenient for you. To schedule your examination using a touch-tone phone, call PSI 24 hours a day at (800) 733-9267. To schedule with a PSI registrar, call Monday through Friday, between 4:30 am and 5:00 pm and Saturday, between 8:00 am and 2:00 pm, Pacific Time. If space is available in the examination site of your choice, you may schedule an

examination 1 day prior to the examination date of your choice, up to 4:00pm PT. Please be prepared to offer alternate examination appointment choices.

RESCHEDULING AN EXAMINATION

A candidate who tests unsuccessfully must wait 2 weeks before retaking the examination. It is not possible to make a new examination appointment on the same day you have taken an examination; this is due to processing and reporting scores. A candidate who tests unsuccessfully on a Wednesday can call the next day, Thursday to reschedule, however may not retest for 2 weeks from the date of failure. You may access a registration form at www.psiexams.com. You may also call PSI at (800) 733-9267. Please note that you may also use the automated system, using a touch-tone phone, 24 hours a day to schedule or reschedule an examination.

CANCELING AN EXAMINATION APPOINTMENT

You may cancel and reschedule an examination appointment without forfeiting your fee if your *cancellation notice is received 2 days before the scheduled examination date*. For example, for a Monday appointment, the cancellation notice would need to be received on the previous Saturday. You may call PSI at (800) 733-9267. Please note that you may also use the automated system, using a touch-tone phone, 24 hours a day in order to cancel and reschedule your appointment.

Note: A voice mail message is not an acceptable form of cancellation. Please use the internet, automated telephone system, or call PSI and speak to a Customer Service Representative.

MISSED APPOINTMENT OR LATE CANCELLATION

Your registration will be invalid, you will not be able to take the examination as scheduled, and you will forfeit your examination fee, if you:

- Do not cancel your appointment 2 days before the schedule examination date;
- Do not appear for your examination appointment;
- Arrive after examination start time;
- Do not present proper identification when you arrive for the examination.

SPECIAL EXAMINATION ARRANGEMENTS

All examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and every reasonable accommodation will be made in meeting a candidate's needs. Applicants with disabilities or those who would otherwise have difficulty taking the examination should request for alternative arrangements with PSI. Requests for any special accommodations should be made in writing, describing the specific accommodations that will be needed, and must include supporting documentation on official letterhead from a licensed professional.



EXAMINATION SITE CLOSING FOR AN EMERGENCY

In the event that severe weather or another emergency forces the closure of an examination site on a scheduled examination date, your examination will be rescheduled. PSI personnel will attempt to contact you in this situation. However, you may check the status of your examination schedule by calling (800) 733-9267. Every effort will be made to reschedule your examination at a convenient time as soon as possible.

EXAMINATION SITE LOCATIONS

LAS VEGAS

**3210 East Tropicana Avenue
Las Vegas, Nevada 89121**

From I-15 – Exit East on Tropicana, travel approximately 4 miles, turn left on Mojave, turn right into the parking lot.

From I-95 – Exit West on Tropicana, travel approximately 1 mile, turn right on Mojave, turn right into the parking lot.

From I-215 – Exit at McCarran Airport, go through the airport tunnel. Take the Airport Bypass towards Swenson St. Turn right on Tropicana, travel East approximately 2 miles, turn left on Mojave, turn right into the parking lot.

RENO

**Airport Plaza Office Building
1755 E Plumb Lane Ste 108
Reno, Nevada 89502**

Take I-80 towards Reno. Take the US-395 exit south towards Carson City, exit #15. Continue on US-395 to Plumb Lane offramp. Turn left on to Plumb Lane. The center will be on the left hand side, on the corner of Terminal and Plumb Lane.

ELKO

**225 Silver Street Ste 102
Elko, Nevada 89801**

From I-80, take the Mountain City exit towards downtown Elko, exit #301. Turn right on Mountain City and continue on Mountain City Highway. Continue on Silver Street until you reach the destination.

REPORTING TO THE EXAMINATION SITE

On the day of the examination, you should arrive at least 30 minutes before your appointment. This extra time is for sign-in, identification, and familiarizing you with the examination process. *If you arrive late, you may not be admitted to the examination site and you will forfeit your examination registration fee.*

REQUIRED IDENTIFICATION AT EXAMINATION SITE

You must provide 2 forms of identification. One must be a VALID form of government issued identification (driver's

license, state ID, passport, military ID), which bears your signature and has your photograph or a complete physical description. The second ID must have your signature and preprinted legal name. All identification provided must match the name on the Examination Registration Form.

If you cannot provide the required identification, you must call (800) 733-9267 at least 3 weeks prior to your scheduled appointment to arrange a way to meet this security requirement. *Failure to provide all of the required identification at the time of the examination without notifying PSI is considered a missed appointment, and you will not be able to take the examination.*

After you sign-in and present the required identification, the proctor will issue you the following examination materials.

- Scratch paper
- Figure booklet(s)
- Set of plans

SECURITY PROCEDURES

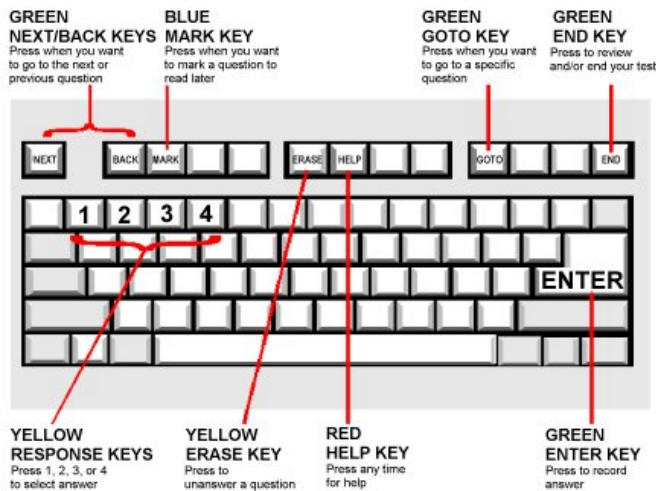
The following security procedures will apply during the examination:

- Cell phones, pagers, and children are not allowed in the examination site.
- Only non-programmable calculators that are silent, battery-operated, do not have paper tape printing capabilities, and do not have a keyboard containing the alphabet will be allowed in the examination site.
- No smoking, eating, or drinking will be allowed in the examination site.
- Copying or communicating examination content is a violation of security regulations and Nevada State Law. Either one may result in the disqualification of examination results and may lead to legal action.

TAKING THE EXAMINATION BY COMPUTER

Taking the PSI examination by computer is simple. You do not need any computer experience or typing skills. You will use fewer keys than you use on a touch-tone telephone. All response keys are colored and have prominent characters. An illustration of the special keyboard is shown here.





IDENTIFICATION SCREEN

You will be directed to a semiprivate testing station to take the examination. When you are seated at the testing station, you will be prompted to confirm your name, identification number, and the examination for which you are registered.

TUTORIAL

Before you start your examination, an introductory tutorial to the computer and keyboard is provided on the computer screen. The time you spend on this tutorial, up to 15 minutes, DOES NOT count as part of your examination time. Sample questions are included as part of the tutorial so that you may practice using the keys, answering questions, and reviewing your answers.

One question appears on the screen at a time. During the examination, minutes remaining will be displayed at the top of the screen and updated as you record your answers.

EXAMINATION QUESTION EXAMPLE

During the examination, you should press 1, 2, 3, or 4 to select your answer or press "MARK" to mark it for later review. You should then press "ENTER" to record your answer and move on to the next question. A sample question display follows:

Question: 3 of 40 Answered: 2 Unanswered: 1 Marked: 0 View: All Time Left(Min): 359

3. What do the stars on the United States of America's flag represent?

(Choose from the following options)

☐ 1. Presidents

☐ 2. Colonies

☐ 3. States

☐ 4. Wars

<< Back Next >>

IMPORTANT: After you have entered your responses, you will later be able to return to any question(s) and change your response, provided the examination time has not run out.

PRETEST ITEMS

In addition to the number of questions per examination, a small number of five to ten "pretest" questions may be administered to candidates during the examinations. These questions will not be scored and the time taken to answer them will not count against examination time. The administration of such non-scored experimental questions is an essential step in developing future licensing examinations.

EXAMINATION REVIEW

PSI, in cooperation with the Nevada State Contractors' Board, will be consistently evaluating the examinations being administered to ensure that the examinations accurately measure competency in the required knowledge areas. Comments may be entered on the computer keyboard during the examination. Your comments regarding the questions and the examinations are welcomed. Comments will be analyzed by PSI examination development staff. While PSI does not respond to individuals regarding these comments, all substantive comments are reviewed. If an error affecting examination scores is discovered as a result, which occurs very rarely, the examination scores of all affected candidates will be automatically adjusted. **This is the only review of examination materials available to applicants.**

SCORE REPORTING

In order to pass the examinations, you must achieve a minimum score of 70%.

Your score will be given to you immediately following completion of the examination. The following summary describes the score reporting process:

- **On screen** – your score will appear immediately on the computer screen. This will happen automatically at the end of the time allowed for the examination; if you are using review features, you will be able to obtain your score immediately when you indicate that you have finished and would like to see your results.
 - If you **pass**, you will immediately receive a successful notification and performance summary on the screen.
 - If you **do not pass**, you will immediately receive an unsuccessful notification on the screen along with a diagnostic report indicating your strengths and weaknesses by examination type. Registration forms for submittal to PSI to retake the examination will be available at the examination site.
- **On paper** – an official score report will be printed at the examination site.

DUPLICATE SCORE REPORTS

You can write to PSI to request a duplicate of your score report for up to 1 year after your examination. The fee for a



duplicate score report is \$15. *Money Order or cashier's check ONLY.*

TIPS FOR PREPARING FOR YOUR LICENSE EXAMINATION

The following suggestions will help you prepare for your examination.

- Planned preparation increases your likelihood of passing.
- Start with a current copy of this Candidate Information Bulletin and use the examination content outline as the basis of your study.
- Read study materials that cover all the topics in the content outline.
- Take notes on what you study. Putting information in writing helps you commit it to memory and it is also an excellent business practice. Underline or highlight key ideas that will help with a later review.
- Discuss new terms or concepts as frequently as you can with colleagues. This will test your understanding and reinforce ideas.
- Your studies will be most effective if you study frequently, for periods of about 45 to 60 minutes. Concentration tends to wander when you study for longer periods of time.

REFERENCE SOURCES

Most of the reference materials listed in the content outlines may be found at one of the following locations:

Professional Booksellers
www.pro-book.com
800-572-8878
615-383-0044

Bookmark, Inc.
www.bookmarki.com
800-642-1288

Builders Book Depot
www.buildersbookdepot.com
800-284-3434

Many of these reference materials are available for purchase at www.psonlinestore.com or by calling the PSI Online Store, toll-free, at (866) 589-3088.

Titles currently in stock are listed on the order form near the end of this candidate information bulletin.

EXAMINATION CONTENT OUTLINES

CONTRACTOR MANAGEMENT SURVEY EXAMINATION

SCOPE OF WORK

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Licensing	15
Estimating and Bidding	7
Lien Law	3
Financial Management	5
Tax Laws	5
Labor Laws	5
Project Management	3
Contracts	6
Business Organization	2
Risk Management	4
Environmental and Safety	5

REFERENCE LIST

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Construction Business and Law Manual for Nevada*, PSI, 3210 E Tropicana Ave, Las Vegas, NV 89121 (See order form at the end of this bulletin.)

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

TRADE EXAMINATIONS

The Nevada State Contractors Board has approved the Examination Content Outlines. The outlines reflect the minimum knowledge required by contractors to perform their duties to the public in a competent and responsible manner. Changes in the content of the examinations will not be made until changes are made in the reference books.

The examination questions reference specific national codes. However, when practicing as a contractor you must check with each local jurisdiction to ensure compliance with additional regulations or modifications adopted by that jurisdiction.

If there is conflicting information between a code, law, or regulation and another authorized reference text, please be aware that the requirements of the code, law, or regulation prevail, and that the examination questions will be referenced to the code, law, or regulation.



The examination may include questions on:

- Reading and interpreting construction codes and regulations.
- Nevada Health department regulations.
- Appropriate building codes.
- Trade materials, tools, equipment and methods.
- Nevada Occupational Safety and Health Rules.

C-1 PLUMBING AND HEATING CONTRACTOR

SCOPE OF WORK

The installation of boilers including all related fittings, piping, valves, gauges, pumps, radiators, convectors, tanks and lines for fuel oil, chimneys, flues, insulation and other appurtenances, the fabrication and installation of all systems of sprinklers for protection from fire, including the appurtenances, the insulation of pipes and ducts to reduce the loss of heat, the creation and maintenance of a permanent means for a supply of pure and wholesome water, ample in volume and of suitable temperatures, for drinking, cooking, bathing, washing and cleaning, for the cleansing of waste receptacles, and the speedy and complete removal of all fluid and semifluid organic wastes and other impurities, as appropriate for the occupation of any premises; the creation and maintenance of a permanent means to supply gas for residential and industrial purposes, the selection, cutting, shaping, fabrication and installation of sheet metal in such forms as cornices, flashings, gutters, leaders, downspouts for rainwater, pans, kitchen equipment, ducts, louvers, patented chimneys and metal flues, the fabrication and installation of systems for the heating, evaporative cooling and circulation of air, excluding cooling systems which require refrigeration as an integral part of the system, the installation of all types of systems for the complete artificial watering or irrigation of gardens, lawns, shrubs, vines, bushes, trees and other decorative vegetation, including any related excavating and backfilling, the installation of pipes from the source of supply of liquefied petroleum and natural gas into a building or structure and the installation of the related vents, the installation, replacement and repair of water heaters, including the connection to existing lines for potable water and gas, the necessary venting and other incidental connections, the installation, replacement and repair of systems for the collection of solar energy to heat potable water, swimming pools and spas, and air which is used to heat structures which house persons, animals or inanimate objects, the fabrication, installation, repair and removal of pipes, pumps, valves and other equipment used in the transfer of chilled water for the control of temperature.

# of Questions	Minimum Passing Score	Time Allowed
100	70	4 Hours

CONTENT OUTLINE

Subject Area	# of Items
Boilers	5
Gas Systems	13
Cleanouts	3

Fixtures and Equipment	5
Hydronics	4
Water Heaters	2
Piping, valves, controls	6
Sheet Metal	5
Water Supply	5
Hangers and Supports	4
Drain, Waste, and Vent	8
Backflow	2
Traps and Interceptors	4
Developed length	3
Isometric Analysis	10
Safety	6
Joints and Connections	3
Solar	4
General Plumbing Regulations	3
Fire Sprinklers	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *Uniform Plumbing Code*, 2006, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.
- *Uniform Mechanical Code*, 2006, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2, www.iapmo.org
- *NFPA 54 National Fuel Gas Code*, 2009, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *NFPA 58 Liquid Petroleum Gas Code*, 2008, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *NFPA 13 - Installation of Sprinkler Systems*, 2007, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:



- *Pipefitter's Handbook*, 1967, 3rd Edition, Forest R. Linsey, Industrial Press, Inc., 200 Madison Avenue, New York, NY 10016, (888) 528-7852, www.industrialpress.com
- *HVAC Duct Construction Standards-Metal and Flexible*, (SMACNA), 4201 Lafayette Center Dr, Chantilly, VA 20151, ISBN: 999424695X
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Modern Hydronic Heating for Residential and Light Commercial Buildings*, John Siegenthaler, P.E., 2004, 2nd edition, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 0-7668-1637-8
- *Pipe Welding Procedures*, Hoobasar Rampaul, 2003, Industrial Press, 200 Madison Ave., New York, NY 10016, (888) 528-7852, www.industrialpress.com
- *Solar Water and Pool Heating Design and Installation Manual*, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu

C-1A BOILERS

SCOPE OF WORK

The installation of boilers including all related fittings, piping, valves, gauges, pumps, radiators, convectors, tanks and lines for fuel oil, chimneys, flues, insulation and other appurtenances.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	5
Fuel Oil	8
Gas	8
Hydronics	15
Valves and Controls	2
Boilers	12

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *Uniform Mechanical Code*, 2006, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org
- *NFPA 54 National Fuel Gas Code*, 2009, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *NFPA 31: Standard for the Installation of Oil-Burning Equipment*. (2006). National Fire Protection Association, 1 Batterymarch, Quincy, MA 02269-9101, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may **not** contain additional papers (loose or attached). **THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER.** References may be tabbed/indexed with permanent tabs only. **Temporary tabs**, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Hydronic Heating for Residential and Light Commercial Buildings*, John Siegenthaler, P.E., 2004, 2nd edition, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 0-7668-1637-8
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *HVAC Pump Handbook* by James B. Rishel, 1996, McGraw-Hill Professional Publishing, ISBN: 70530335

C-1B FIRE SPRINKLERS

SCOPE OF WORK

The fabrication and installation of all systems of sprinklers for protection from fire, including the appurtenances.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Sprinkler Systems	16
Standpipe Systems	16
Inspection, Testing and Maintenance	8
General Regulations	5



REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *NFPA 14* - Installation of Standpipe and Hose Systems, 2007, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *NFPA 25*: Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, 2008, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *NFPA 13* - Installation of Sprinkler Systems, 2007, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *Nevada Fire Marshall Code Chapter 477*

C-1C PIPE AND DUCT INSULATION

SCOPE OF WORK

The insulation of pipes and ducts to reduce the loss of heat.

# of Questions	Minimum Passing Score	Time Allowed
30	21	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Pipe Insulation	12
Duct Insulation	12
Safety	6

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 2006, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Commercial and Industrial Insulation Standards*, 6th Edition, 2008, National Insulation Association, 99 Canal Center Plaza, Suite 222 Alexandria, Virginia 22314, (703) 683-6422 | Fax (703) 549-4838. You may also use the 5th edition thru May 15, 2009.
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** Code of Federal Regulations - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-1D PLUMBING CONTRACTOR

SCOPE OF WORK

The creation and maintenance of a permanent means for a supply of pure and wholesome water, ample in volume and of suitable temperatures, for drinking, cooking, bathing, washing and cleaning, for the cleansing of waste receptacles, and the speedy and complete removal of all fluid and semifluid organic wastes and other impurities, as appropriate for the occupation of any premises; the creation and maintenance of a permanent means to supply gas for residential and industrial purposes.

# of Questions	Minimum Passing Score	Time Allowed
75	53	3 Hours



CONTENT OUTLINE

Subject Area	# of Items
General Plumbing Regulations	3
Gas Systems	13
Cleanouts	4
Fixtures and Equipment	5
Water Heaters	2
Piping, valves, controls	9
Water Supply	5
Hangers and Supports	4
Drain, Waste, and Vent	8
Backflow	2
Traps and Interceptors	4
Developed length	3
Isometric Analysis	10
Joints and Connections	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *Uniform Plumbing Code*, 2006, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.
- *NFPA 54 National Fuel Gas Code*, 2009, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *NFPA 58 Liquid Petroleum Gas Code*, 2008, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Mathematics for Plumbers and Pipefitters*, 7th Edition, 2007, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 1428304614

C-1E SHEET METAL

SCOPE OF WORK

The selection, cutting, shaping, fabrication and installation of sheet metal in such forms as cornices, flashings, gutters, leaders, downspouts for rainwater, pans, kitchen equipment, ducts, louvres, patented chimneys and metal flues.

# of Questions	Minimum Passing Score	Time Allowed
40	28	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Ducts	20
Chimneys, Flues, Vents	4
Hoods and Ventilation Equipment and Devices	6
General Knowledge	6
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 2006, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *HVAC Duct Construction Standards-Metal and Flexible*, (SMACNA), 4201 Lafayette Center Dr, Chantilly, VA 20151, ISBN: 999424695X
- *Sheet Metal*, 1995, American Technical Publishers



- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-1F HEATING, COOLING, AND CIRCULATING AIR CONTRACTOR

SCOPE OF WORK

The fabrication and installation of systems for the heating, evaporative cooling and circulation of air, excluding cooling systems, which require refrigeration as an integral part of the system.

# of Questions	Minimum Passing Score	Time Allowed
30	21	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Safety	3
Piping	9
Equipment	10
Valves and Controls	3
Ducts	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 2006, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Refrigeration and Air Conditioning*, 2004, Really Goodheart-Wilcox, ISBN: 1566377242
- *Mathematics for Plumbers and Pipefitters*, 7th Edition, 2007, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 1428304614
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-1G PIPES AND VENTS FOR GAS CONTRACTOR

SCOPE OF WORK

The installation of pipes from the source of supply of liquefied petroleum and natural gas into a building or structure and the installation of the related vents.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Natural Gas Piping	12
LP Gas Piping	12
Chimneys Flues and Vents	10
Appliance Installation	5
Sizing and Estimating	5
Testing and Inspection	3
Combustion Air	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *Uniform Mechanical Code*, 2006, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA



91761 USA, 800.85.IAPMO, ISBN: 884590-77-2
www.iapmo.org

- NFPA 54 National Fuel Gas Code, 2009, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 58 Liquid Petroleum Gas Code, 2008, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

C-1H WATER HEATER CONTRACTOR

SCOPE OF WORK

The installation, replacement, and repair of water heaters, including the connection to existing lines for potable water and gas, the necessary venting, and other incidental connections.

# of Questions	Minimum Passing Score	Time Allowed
20	14	45 Minutes

CONTENT OUTLINE

Subject Area	# of Items
Code	16
General Water Heater Knowledge	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.
This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- Uniform Plumbing Code, 2006, Uniform Plumbing Code, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References

may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- The Water Heater Workbook : A Hands-On Guide to Water Heaters, Suzanne Weingarten, Larry Weingarten, Elemental Enterprises, PO Box 928, Monterey, CA 93942, ISBN: 0-9630344-0-5

C-2 ELECTRICAL CONTRACTOR

SCOPE OF WORK

A person who has a license designated classification C-2 may install any electrical wires, fixtures, appliances, apparatuses, raceways and conduits.

# of Questions	Minimum Passing Score	Time Allowed
80	56	4 Hours

CONTENT OUTLINE

Subject Area	# of Items
General Electrical Knowledge	6
Service, Feeders, and Branch Circuits	7
Grounding and Bonding	7
Conductors and Cables	8
Raceways and Boxes	7
Special Occupancies and Equipment	5
Electrical Power	6
Motors	6
Low Voltage	2
Lighting	5
Illuminated Signs	2
Fire Detection and Alarm Systems	2
Safety Information	8
Transmission Lines	5
Overcurrent Protection	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- National Electrical Code or National Electrical Code Handbook, 1999, Earley, Sheehan, Caloggero, National



Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9

- NFPA 72 - National Fire Alarm Code or National Fire Alarm Code Handbook, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Ugly's Electrical References*, George V. Hart, 2008, Burleson Distributing Corp., (800) 531-1660, www.uglyselectrical.com, ISBN 0-9623229-7-0
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR Code of Federal Regulations - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *National Electrical Safety Code (C2-1997)*, Institute of Electrical Electronics Engineers, Inc., 345 East 47th Street, New York, NY 10017, (732) 981-0060
- *Lineman's and Cableman's Handbook*, 9th Edition, 2002, McGraw-Hill, PO Box 182605, Columbus, OH 43218, (800) 338-3937, www.mcgraw-hill.com, ISBN: 0-07-036011-1

C-2A ELECTRICAL WIRING CONTRACTOR

SCOPE OF WORK

The installation, alteration and repair of electrical wires, fixtures, appliances and apparatuses, and the performance of any related wiring on existing structures.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
General Electrical Knowledge	4
Service, Feeders, and Branch Circuits	5
Grounding and Bonding	6
Conductors and Cables	8
Overcurrent Protection	4
Special Occupancies and Equipment	5
Electrical Power	5
Low Voltage	2
Lighting	4
Illuminated Signs	2
Fire Detection and Alarm Systems	4
Safety Information	3
Motors	3

Raceways and Enclosures	5
-------------------------	---

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9
- NFPA 72 - National Fire Alarm Code or National Fire Alarm Code Handbook, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Ugly's Electrical References*, George V. Hart, 2008, Burleson Distributing Corp., (800) 531-1660, www.uglyselectrical.com, ISBN 0-9623229-7-0
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR Code of Federal Regulations - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-2C FIRE DETECTION CONTRACTOR

SCOPE OF WORK

The installation, alteration and repair of electrical sensors and alarms used to detect heat and smoke, including all appurtenances and related wiring.

# of Questions	Minimum Passing Score	Time Allowed
55	39	2 Hours



CONTENT OUTLINE

Subject Area	# of Items
General Electrical Knowledge	5
Wiring	8
Grounding	3
Power Supply	5
Detectors	15
Alarms Notification	14
General Regulations	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9
- *NFPA 101 Life Safety Code*, 2003, NFPA, 1 Batterymarch, Quincy, MA 02269
- *NFPA 72 - National Fire Alarm Code or National Fire Alarm Code Handbook*, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Fire Alarm Signaling Systems*, 1994, 2nd edition, Bukowski & O'Laughlin, National Fire Protection Association, 1 Batterymarch, Quincy, MA 02269, (480) 948-3363, ISBN: 0-87765-399-2
- *Certified Alarm Technicians Manual - Level 1*, 2001, National Burglar and Fire Alarm Association, National Training School, (866) 636-1687, www.alarm.org
- *Nevada Fire Marshall Code Chapter 477*

C-2D LOW VOLTAGE

SCOPE OF WORK

The installation, alteration and repair of systems that use fiber optics or do not exceed 91 volts, including telephone systems, sound systems, cable television systems, closed circuit video systems, satellite dish antennas, instrumentation and temperature controls, computer networking systems and landscape lighting.

# of Questions	Minimum Passing Score	Time Allowed
35	25	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Sound and Communications	5
Services, Feeders, Branch Circuits and Overcurrent Protection	5
Conductors	5
General Knowledge and Calculations	6
Grounding and Bonding	4
Power Supplies	3
Intrusion Alarm Systems	5
Utilization and general use equipment	1
Raceways and Enclosures	1

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Telecommunications Wiring*, Clyde N. Herrick, 3rd edition, 2001, Prentice Hall PTR, Upper Saddle River, NJ 07458, ISBN: 013-028696-6



- *Certified Alarm Technicians Manual - Level 1*, 2001, National Burglar and Fire Alarm Association, National Training School, (866) 636-1687, www.alarm.org

C-2E LINES TO TRANSMIT ELECTRICITY

SCOPE OF WORK

The installation, alteration and repair of overhead or underground secondary lines which transmit electricity, including the installation of poles, towers, anchors, guys, transformers, substations, circuit breakers and any other related hardware, equipment or systems.

# of Questions	Minimum Passing Score	Time Allowed
40	28	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Transformers	6
Electrical Knowledge	5
Conductors	5
Overhead Lines	4
Underground Lines	4
Equipment and Safety	4
Grounding Methods	3
Service Drops and Laterals	3
Poles and Structures	3
Electric Supply Stations	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *National Electrical Safety Code* (C2-1997), Institute of Electrical Electronics Engineers, Inc., 345 East 47th Street, New York, NY 10017, (732) 981-0060
- *Lineman's and Cableman's Handbook*, 9th Edition, 2002, McGraw-Hill, PO Box 182605, Columbus, OH 43218, (800) 338-3937, www.mcgraw-hill.com, ISBN: 0-07-036011-1
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** Code of Federal Regulations - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-2F RESIDENTIAL WIRING

SCOPE OF WORK

The installation, alteration and repair of electrical wires, fixtures, appliances and apparatuses whose electrical current does not exceed 600 volts on new or existing structures which do not exceed more than three stories above the ground.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
General Electrical Knowledge	9
Service, Feeders, and Branch Circuits	10
Grounding and Bonding	7
Conductors and Cables	7
Overcurrent Protection	4
Electrical Power	2
Low Voltage	2
Fire and Intrusion Detection and Alarm Systems	2
Safety Information	4
Raceways and Enclosures	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:



- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Ugly's Electrical References*, George V. Hart, 2008, Burleson Distributing Corp., (800) 531-1660, www.uglyselectrical.com, ISBN 0-9623229-7-0
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-2G PHOTOVOLTAICS

SCOPE OF WORK

(h) PHOTOVOLTAICS (subclassification C-2h): The installation, alteration and repair of photovoltaic cells, batteries and inverters used in the conversion of solar energy in to electricity, but not the installation, alteration or repair of electrical wires beyond the service panel.

# of Questions	Minimum Passing Score	Time Allowed
35	25	90 Minutes

CONTENT OUTLINE

Subject Area	# of Items
Photovoltaic Theory	3
General Electrical Knowledge and Theory	3
Batteries	8
Components	8
Photovoltaic Installation	5
Estimating and Calculations	5
Safety	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed. Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 2005, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Practical Photovoltaics, Electricity from Solar Cells*, 2002, Richard J. Komp, Ph.D. AATEC Publications, P.O.Box 7119, Ann Arbor, MI 48107 (800) 995-1470. ISBN: 0-937948-11-X
- *The Easy Guide to Solar Electric Part II Installation Manual*, 2001, Adi Pieper, Adi Solar 209 Arroyo Salado, Santa Fe, NM 87508 www.adisolar.com
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Ugly's Electrical References*, George V. Hart, 2008, Burleson Distributing Corp., (800) 531-1660, www.uglyselectrical.com, ISBN 0-9623229-7-0

C-3 CARPENTRY, MAINTENANCE, AND MINOR REPAIRS

SCOPE OF WORK

The construction of form work, framing or rough carpentry necessary to construct framed structures, the installation or repair of individual components of framing systems, rough carpentry or associated work, including the construction or installation of subflooring, siding, exterior staircases and railings, roof decking, truss members and sheathing, and the fabrication, installation, remodeling and repair of wood and wood products for structural and finishing purposes, such as doors, windows, cabinets and fixtures. The installation, repair and finishing of cabinets, sash casing, door casing, wooden flooring, baseboards, countertops and other millwork. Finish carpentry does not include the installation of ceramic tile, marble and artificial or cultured stone. The installation of material used for the insulation of buildings and the application of weather stripping and caulking for the internal control of the effects of weather. The fabrication, erection and installation of guides, counterweights, tracks, weather stripping, automatic and manual controls and all other apparatuses and equipment appurtenant to the efficient installation and operation of overhead doors. The installation, taping and finishing of drywall, panels and



assemblies of gypsum wallboard, sheathing acoustical tile and studs made of sheet metal for the framing of ceilings and nonstructural partitioning.

# of Questions	Minimum Passing Score	Time Allowed
56	40	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	6
Insulation	1
Windows and Doors	3
Rough Carpentry	23
Finish Carpentry	14
Drywall	7
Siding	2

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Carpentry & Building Construction*, 6th Edition, 2004, Feirer, Hutchings and Feirer, ISBN 007822702X, Glencoe-McGraw-Hill, (800) 334-7344, P.O. Box 543, Blacklick, OH 43004, <https://www.mcgrawhill.ca/highereducation/php/bookinfo.php?isbn=007822702X&pNumber=336830>

(You may also use the 1997 edition, ISBN 002838699X).

- *Guide to Good Practice for Handling, Installing, Restraining, and Bracing of Metal Plate Connected Wood Trusses*, 2006, Wood Truss Council of America, (608) 274-4849, www.woodtruss.com
- *Gypsum Construction Handbook*, 2000, Centennial Edition, United States Gypsum Company
- *"Finish Carpentry : A Complete Interior & Exterior Guide"*, 1995, Rodman P. Neumann (Editor), William Perkins Spence, 200 Constitution Ave NW, Washington, DC 20210, (202) 693-6000, ISBN: 0-8069-0700-2

C-3A CARPENTRY, REMODELING AND REPAIRS

SCOPE OF WORK

The construction of form work, framing or rough carpentry necessary to construct framed structures, the installation or repair of individual components of framing systems, rough carpentry or associated work, including the construction or installation of subflooring, siding, exterior staircases and railings, roof decking, truss members and sheathing, and the fabrication, installation, remodeling and repair of wood and wood products for structural and finishing purposes, such as doors, windows, cabinets and fixtures.

# of Questions	Minimum Passing Score	Time Allowed
46	33	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	6
Windows and Doors	3
Rough Carpentry	16
Finish Carpentry	16
Siding	3
Drywall	2

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org



Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Carpentry & Building Construction, 6th Edition*, 2004, Feirer, Hutchings and Feirer, ISBN 007822702X, Glencoe-McGraw-Hill, (800) 334-7344, P.O. Box 543, Blacklick, OH 43004, <https://www.mcgrawhill.ca/highereducation/php/bookinfo.php?isbn=007822702X&pNumber=336830> (You may also use the 1997 edition, ISBN 002838699X).
- *"Finish Carpentry: A Complete Interior & Exterior Guide"*, 1995, Rodman P. Neumann (Editor), William Perkins Spence, 200 Constitution Ave NW, Washington, DC 20210, (202) 693-6000, ISBN: 0-8069-0700-2

C-3B FINISH CARPENTRY

SCOPE OF WORK

The installation, repair and finishing of cabinets, sash casing, door casing, wooden flooring, baseboards, countertops and other millwork. Finish carpentry does not include the installation of ceramic tile, marble and artificial or cultured stone.

# of Questions	Minimum Passing Score	Time Allowed
30	21	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Fabrication	6
Installation	5
Materials	5
Finishing	4
Hand tools	3
Safety	3
Machines	2
Plans and Estimating	2

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your

answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *"Finish Carpentry : A Complete Interior & Exterior Guide"*, 1995, Rodman P. Neumann (Editor), William Perkins Spence, 200 Constitution Ave NW, Washington, DC 20210, (202) 693-6000, ISBN: 0-8069-0700-2
- *The Complete Illustrated Guide to Furniture and Cabinet Construction*, Andy Rae, 2001, US Dept of Labor, 200 Constitution Ave NW, Washington, DC 20210, (202) 693-6000, www.usdol.gov
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-4 PAINTING AND DECORATING CONTRACTOR

SCOPE OF WORK

A person who holds a classification C-4 license may, apply any type of paint, varnish, shellac, stain, protective coatings and wax, attach papers, fabrics and plastics to the surfaces of buildings and their appurtenances, examine and prepare surfaces for painting and wallcovering, and install drywall, metal studs and acoustical tile.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours



CONTENT OUTLINE

Subject Area	# of Items
Materials	8
Surface Preparation	12
Application	7
Tools	6
Problems and Prevention	4
Safety	5
Drywall	5
Color	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Painting & Decorating Craftsman's Manual and Textbook* - Eighth Edition, 1995, Painting and Decorating Contractors of America, 3913 Old Lee Hwy, Ste 33B, Fairfax, VA 22030, ISBN: 0-915050-00-5
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Gypsum Construction Handbook*, 2000, Centennial Edition, United States Gypsum Company

C-4A PAINTING CONTRACTOR

SCOPE OF WORK

The application of all paints, varnishes, protective coatings, shellacs, stains and other pigment by brush, spray or roller.

# of Questions	Minimum Passing Score	Time Allowed
30	21	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Materials	6
Surface Preparation	6
Application	6
Tools	4
Problems and Prevention	2
Safety	4
Color	2

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is CLOSED BOOK.

The following reference materials are not allowed in the examination center:

- *Painting & Decorating Craftsman's Manual and Textbook* - Eighth Edition, 1995, Painting and Decorating Contractors of America, 3913 Old Lee Hwy, Ste 33B, Fairfax, VA 22030, ISBN: 0-915050-00-5
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-5 CONCRETE CONTRACTOR

SCOPE OF WORK

A person who holds a classification C-5 license may:

- Prepare the surface and place reinforcement steel and other embedded materials essential to or comprising an integral part of the concrete or concrete construction;
- pour, place, finish and install concrete;



- construct and assemble forms, molds, slipforms and pans;
- apply concrete sealants and other waterproofing products; and
- saw, cut, drill and core concrete and asphaltic paving material.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	6
Concrete-Earthwork	7
Concrete	15
Concrete-Reinforcement	10
Concrete-Formwork	12
Concrete - Cutting	10

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Formwork for Concrete*, 1995, 6th Edition, M.K. Hurd American Concrete Institute, 38800 International Way/ Country Club Drive, PO Box 9094, Farmington Hills, MI 48333

- *The Contractor's Guide to Quality Concrete Construction*, 2005, 3rd Edition, American Concrete Institute, 38800 International Way/ Country Club Drive, PO Box 9094, Farmington Hills, MI 48333, (248) 848-3700, www.aci-int.org
- *Concrete Sawing, Drilling, and Coring*, 1998, The Aberdeen Group, 426 S Westgate ST, Addison, IL 60101, ISBN: 0-924659-10-6

C-6B SIGN CONTRACTOR

SCOPE OF WORK

The fabrication, installation and erection of electrical signs and the installation of any related wiring.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
National Electrical Code	13
Uniform Sign Code	15
Neon	10
Sheet Metal	6
Safety	6

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9
- *Uniform Sign Code*, 1997, ISBN: 9997922832

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:



- *Neon Techniques and Handling*, 3rd Ed, Sign Language Store, (800) 843-2763
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Sheet Metal*, 1995, Leo Meyer, American Technical Publishers

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9
- *ASME A17.1 Safety Code for Elevators and Escalators*, 2000, American Society of Mechanical Engineers, Three Park Ave, New York, NY 10065.

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

C-7 ELEVATION AND CONVEYANCE CONTRACTOR

SCOPE OF WORK

A person who holds a classification C-7 license may fabricate and install systems designed to transport persons, animals and other chattels in elevators, conveyors, dumbwaiters and escalators, including any appurtenant controls, signal systems, devices and equipment.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Wire Rope	2
Clearance and Space Limits	8
Electrical	2
Testing	4
Engineering and Inspection	4
Safety Devices	9
Controls	2
Operating Limitations	2
Drive Mechanisms	4
Fire Service	3
Maintenance and Repairs	6
Escalators and Dumbwaiters	2
Emergency Power	2

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

The following reference materials are not allowed in the examination center:

- *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.
- *National Elevator Manufacturing Industries Installation Manual*, ISBN: 1886536198
- *Nevada Administrative Code* Chapters 618.400, Elevators, Dumbwaiters, Escalators, Moving Walks, and Related Equipment

C-10 LANDSCAPE CONTRACTING

SCOPE OF WORK

A person who holds a classification C-10 license may grade and prepare plots of land for architectural horticulture, decoratively treat, arrange, plant and maintain gardens, lawns, shrubs, vines, bushes, trees and other vegetation, construct systems of drainage and landscape irrigation, install rocks, sand, gravel and other landscape materials that use Xeriscape principles, hydroseed by spraying mulch, seeds and nutrients under pressure, control soil erosion and install nonengineered decorative landscape ponds or nonengineered prefabricated trellises and arbors. Additionally, a person who holds a classification C-10 license may install nonload-bearing walkways using brick or stone not exceeding 200 square feet in area, patio areas using brick or stone not exceeding 400 square feet in area, landscape retaining walls to a height not exceeding 3 feet and landscape lighting not exceeding 24 volts.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Planning, Design and Pre-construction activities	7
Soils, Site Preparation, Drainage, and Erosion Control	8
Plants Ground cover, trees, and other	9



vegetation	
Irrigation	13
Walkways, patios, retaining walls, and hardscaping	8
Ponds and water features	4
Xeriscaping	6
Low Voltage Lighting	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is CLOSED BOOK.

The following reference materials are not allowed in the examination center:

- *Simplified Irrigation Design*, Pete Melby, 1995, 2nd Edition, John Wiley and Sons, (212) 850-6011, www.wiley.com, ISBN 0-471-28622-2
- *Landscaping Principles & Practices*, Jack Ingels, 2004, 6th Edition, Delmar Thompson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 1-4018-3410-8
- *Waterwise Landscaping with Trees, Shrubs, and Vines: A Xeriscape Guide for the Rocky Mountain Region, California, and the Desert Southwest*, James M Knopf, 2003, 2nd Edition, BookMasters, Inc., (800) 537-6727, www.bookmasters.com, ISBN 0967045118
- *Landscape Construction*, David Sauter, 2005, 2nd Edition, Delmar Thompson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 140184281X

C-13 SHEET METAL CONTRACTOR

SCOPE OF WORK

A person who holds a classification C-13 license may select, cut, shape, fabricate and install sheet metal in such forms as cornices, flashings, gutters, leaders, downspouts for rainwater, pans, kitchen equipment, ducts, louvers, patented chimneys and metal flues.

# of Questions	Minimum Passing Score	Time Allowed
40	28	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Ducts	20
Chimneys, Flues, Vents	4

Hoods and Ventilation Equipment and Devices	6
General Knowledge	6
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *HVAC Duct Construction Standards-Metal and Flexible*, (SMACNA), 4201 Lafayette Center Dr, Chantilly, VA 20151, ISBN: 999424695X
- *Sheet Metal*, 1995, American Technical Publishers
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR Code of Federal Regulations - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-14 STEEL REINFORCING AND ERECTION

SCOPE OF WORK

The fabrication, placement and tying of steel reinforcing bars (rods), and post-tensioning to reinforce concrete buildings and structures. The fabrication and erection of structural steel shapes and plates used as structural members, or tanks, including any connected riveting, welding and rigging. The assembling, casting, cutting, shaping, stamping, forging, fabricating and installing of metals for the architectural



treatment, ornamental decoration or security of structures, but does not include the work authorized by a classification C-13 license issued by the Board in the specialty of using sheet metal. The installation of such materials as are generally accepted by contractors for use as curtain wall materials. The installation of metal doors and frames and metal windows and frames. The construction of window walls in the fronts of stores and the installation of lightweight metals to a height not exceeding 25 feet from the threshold of the entrance on the ground floor of the store. The construction of structures made of prefabricated steel for the support, shelter or enclosure of persons, animals or other chattels. The fabrication and installation of awnings and louvers made of wood, fabric, plastics, metal or other acceptable products. Rigging as it is customarily accepted by contractors and the operation of cranes.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Post-tensioning	10
Reinforcing Steel	10
Safety – OSHA Subpart R	7
Safety – General	6
Steel Decks	7
Steel Joists and Girders	20

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is CLOSED BOOK.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Code of Federal Regulations*, Title 29, Part 1926 (OSHA), 2001, Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250, Subpart R, (202) 512-1262
- *Instructional Manual for Training and Certification of Steel Personnel for Unbonded Post-Tensioning*, 2003, Post Tensioning Institute. 1717 West Northern Avenue, Ste 114, Phoenix, AZ 85021, (602) 870-7540
- *Placing Reinforcing Bars*, 8th Ed, CRSI, 2005, 933 North

Plum Grove Road, Schaumburg, IL 60173, (847) 517-1200, www.crsi.org

- *Handling and Erection of Steel Joists and Joist Girders*, 1987 or 2006 edition, Steel Joist Institute, 3127 10th Avenue North Extension, Myrtle Beach, South Carolina 29577-6760, www.steeljoist.org
- *CRSI Standard Practices*
- *SDI Manual of Construction with Steel Deck*, 2006, 2nd Edition, Steel Deck Institute, (847) 458-4647, www.sdi.org.

C-14A REINFORCING STEEL

SCOPE OF WORK

The fabrication, placement and tying of steel reinforcing bars (rods), and post-tensioning to reinforce concrete buildings and structures.

# of Questions	Minimum Passing Score	Time Allowed
30	21	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Post-tensioning	11
Reinforcing Steel	13
Safety – General	6

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is CLOSED BOOK.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Placing Reinforcing Bars*, 8th Ed, CRSI, 2005, 933 North Plum Grove Road, Schaumburg, IL 60173, (847) 517-1200, www.crsi.org
- *Instructional Manual for Training and Certification of Steel Personnel for Unbonded Post-Tensioning*, 2003, Post Tensioning Institute. 1717 West Northern Avenue, Ste 114, Phoenix, AZ 85021, (602) 870-7540
- *CRSI Standard Practices*



C-15 ROOFING AND SIDING CONTRACTOR

SCOPE OF WORK

The installation, application, alteration and repair of watertight and weatherproof material used on roofs, such as asphalt, pitch, tar, felt, flax, shakes, shingles, aluminum, tile, slate and urethane, but not the installation of siding or devices, such as stripping, for the internal control of the effects of weather, the installation, alteration and repair of siding, by use of material such as wood, aluminum, enameled steel, plastic and glass, to make the walls of a structure watertight and weatherproof, the installation of glass, metal, plastic, urethane and other material used for the insulation of buildings, the application of solutions of rubber, latex, asphalt, pitch, tar and other materials to surfaces to prevent water in any form from penetrating the surfaces.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	6
Roofing - Substrate	8
Roofing - Steep	17
Roofing Repairs	4
Roofing - Elastomeric	7
Roofing - Built - up Bituminous	7
Siding - General Knowledge	8
Sheet Metal and Flashing	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, ICBO, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *NRCA Roofing and Waterproofing Manual*, 2001, 5th Edition, National Roofing Contractor's Association, 10255 West Higgins Road, Suite 600, Rosemont, IL 60018-5607
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *D4756-96 Standard Practice for Installation of Rigid Poly(Vinyl Chloride) (PVC) Siding and Soffit*
- *Roofing Construction and Estimating*, Daniel Atcheson, 1995, Craftsman Book Company, 6085 Corte de Cedro, Carlsbad, CA 92009, (800) 829-8123, www.craftsman-book.com, ISBN: 1-57218-007-2
- *Carpentry & Building Construction*, 6th Edition, 2004, Feirer, Hutchings and Feirer, ISBN 007822702X, Glencoe-McGraw-Hill, (800) 334-7344, P.O. Box 543, Blacklick, OH 43004, <https://www.mcgrawhill.ca/highereducation/php/bookinfo.php?isbn=007822702X&pNumber=336830> (You may also use the 1997 edition, ISBN 002838699X).

C-15A ROOFING CONTRACTOR

SCOPE OF WORK

The installation, application, alteration and repair of watertight and weatherproof material used on roofs, such as asphalt, pitch, tar, felt, flax, shakes, shingles, aluminum, tile, slate and urethane, but not the installation of siding or devices, such as stripping, for the internal control of the effects of weather.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	6
Roofing - Substrate	7
Roofing - Steep	18
Roofing Repairs	4
Roofing - Elastomeric	6
Roofing - Built - up Bituminous	7
Sheet Metal and Flashing	2

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become



available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, ICBO, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *NRCA Roofing and Waterproofing Manual*, 2001, 5th Edition, National Roofing Contractor's Association, 10255 West Higgins Road, Suite 600, Rosemont, IL 60018-5607
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Roofing Construction and Estimating*, Daniel Atcheson, 1995, Craftsman Book Company, 6085 Corte de Cedro, Carlsbad, CA 92009, (800) 829-8123, www.craftsman-book.com, ISBN: 1-57218-007-2

C-17 LATHING AND PLASTERING

SCOPE OF WORK

The selection and application of wood and metal lath and any other material or product manufactured to provide key or suction bases for the support of plaster coatings, including channel iron for the support of fireproof lath and solid plaster partitions, but does not include any plastering or erecting of a wall, ceiling or soffit to which the bases are applied, the coating of surfaces with a plaster, made of a mixture of such materials as sand, cement, quicklime, hydrated lime and water, and the installation of lath or other base for the plaster, the installation and coating of gypsum wallboard and sheathing, including the installation of a system of suspended ceilings made of gypsum wallboard, the installation of wood, mineral, fiber and other types of acoustical tile by the use of adhesives or other acceptable means, including the preparation of the surface for the installation, the application to surfaces, whether by manual or mechanical means, of coatings made of stucco and cement, including the preparation of the surfaces and the provision of a base, including fireproof lath, for the coatings, and the fireproofing of structural members, the erection and installation of studs

made of sheet metal for the framing of ceilings and nonstructural partitioning walls.

# of Questions	Minimum Passing Score	Time Allowed
40	28	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	5
Surface Preparation	11
Drywall	5
Application	10
Base and Finish Coat	9

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, ICBO, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Plastering Skills* By F. Van Den Branden, T. L. Hartsell, 1984, American Technical Publishers, 1115 W 175th St, Homewood, IL 60430
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Gypsum Construction Handbook*, Centennial Edition, 2000, United States Gypsum Company



C-18 MASONRY CONTRACTOR

SCOPE OF WORK

The board will grant to qualified applicants a license in the specialty of masonry. The board designates such a license as a "classification C-18" license. A person who holds a classification C-18 license may select, cut and lay brick, other baked clay products, rough cut and dressed stone, artificial stone, precast blocks and structural glass brick or block at random or in courses, with or without mortar. He may not apply tile to existing surfaces.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Safety	5
Concrete Block	20
Brick	11
Specialty Masonry	6
Mortar and Grout	8

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Building Code*, 1997, International Conference of Building Officials, ICBO, 5360 Workman Mill Road, Whittier, CA 90601, (800) 284-4406, www.icbo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-

9267, (See order form at the end of the Candidate Information Bulletin.)

- *Modern Masonry*, Clois E. Kicklighter, 2003, Goodheart-Willcox Company, Inc., 18604 W. Creek Drive, Tinley Park, IL 60477, ISBN: 1-56637-962-8

C-20 TILING CONTRACTOR

SCOPE OF WORK

Surface preparation and application of stone, ceramic or similar materials.

# of Questions	% Required to Pass	Time Allowed
40	28	1.5 hours

CONTENT OUTLINE

Subject Area	# of Items
Surface Preparation	12
Installation and Adhesives	22
Grout and Finishing	6

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is CLOSED BOOK.

The following reference materials are not allowed in the examination center:

- *Setting Tile*, 1995, John Byrne, The Taunton Press 63 South Main St., P.O. Box 5506, Newtown, CT 06470-5506 2034268171 2034263434
- *Builders Guide to Floors*, McGraw-Hill P.O. Box 182605, Columbus, OH 43218-2605 8003383937 6147593644
- *ANSI A108 & A118*, American National Standard specifications for the Installation of Ceramic Tile, American National Standards Institute 1819 L Street NW Washington, DC 20036 2126424980 2123980023
- *Craft Training for the Tile Professional - Tub Surrounds*, National Tile Contractors Association P.O. Box 13629, Jackson, Mississippi 39236 601-939-2071 601-932-6117



C-21 REFRIGERATION AND AIR CONDITIONING CONTRACTOR

SCOPE OF WORK

The construction, erection and installation of devices, machinery and units for the control of air temperatures below 50°F in refrigerators, refrigerated rooms and insulated spaces, and installation of any related insulation, ducts, blowers, registers, controls over humidity and thermostatic controls, lines for supplying natural gas from the unit to the point of connection in the existing line for natural gas at the meter or at any point thereafter, electrical service from the unit's device to protect against excessive current to the main electrical panel, but not the installation of other gas or electric services for the devices, machinery or units, the installation, repair, service and maintenance of equipment, devices, machinery, units and related ductwork which use evaporation, refrigeration, boilers or combustion for the control of air temperatures in structures where people live, work or assemble or animals are kept, the selection, cutting, shaping, fabrication and installation of sheet metal in such forms as cornices, flashings, gutters, leaders, downspouts for rainwater, pans, kitchen equipment, ducts, louvres, patented chimneys and metal flues, the repair and replacement of any parts of existing units or systems of air-conditioning and refrigeration, including the compressors, motors, relays, coils, heat exchangers and other appurtenances and equipment, but not the replacement of complete condenser assemblies on remote systems, air handlers or any work that may alter the design of an existing system, the installation of the collectors, piping, storage and other equipment used in the conversion of solar energy to energy used for the control of air temperatures, the installation of the chiller, piping, pumps, storage tanks, coils, cooling tower and other equipment used in the production and use of chilled water for the control of temperatures, the fabrication, installation, repair and removal of pipes, pumps, valves and other equipment used in the transfer of hot water for the control of temperatures.

# of Questions	Minimum Passing Score	Time Allowed
85	60	3 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	6
Insulation	1
Hangers and Supports	3
Sound, Vibration and Seismic Control	1
Heating and Cooling Principles	3
Refrigerants and Refrigeration	7
Load Calculations	6
Testing, Adjusting and Balancing	3
Controls	5
Machine Room	1
A/C and Heat Pump Equipment	4
Furnaces and Heaters	4
Hydronics	2
Chimneys, Flues and Vents	5

Combustion Air	2
Fuel Systems	10
Ducts	6
Evaporative Cooling	2
Chillers	3
Solar	4
Ventilation and Exhausts	3
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org
- *NFPA 54 National Fuel Gas Code*, 1999, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Modern Refrigeration and Air Conditioning*, Althouse, Turnquist, Bracciano, 2000, Goodheart-Willcox, ISBN: 1566377242
- *HVAC Duct Construction Standards-Metal and Flexible*, (SMACNA), 4201 Lafayette Center Dr, Chantilly, VA 20151, ISBN: 999424695X
- *Manual N*, 4th Edition, 1988, ACCA, 2800 Shirlington Rd, Ste 300, Arlington, VA 22206, (703) 575-4477, www.acca.org
- *Solar Water and Pool Heating Design and Installation Manual*, 1992, Florida Solar Energy Center, 1670



Clearlake Road, Cocoa, FL 32922, (321) 638-1015, www.fsec.ucf.edu

- *Evaporative Air Conditioning Handbook*, 3rd Edition, 1997, John R. Watt, Will K. Brown, Prentice Hall PTR, Fairmont Press, 700 Indian Trail, Liburn, GA 30247, ISBN: 0-88173-193-5 FP

C-21A REFRIGERATION CONTRACTOR

SCOPE OF WORK

The construction, erection and installation of devices, machinery and units for the control of air temperatures below 50°F in refrigerators, refrigerated rooms and insulated spaces, and installation of any related insulation, ducts, blowers, registers, controls over humidity and thermostatic controls, lines for supplying natural gas from the unit to the point of connection in the existing line for natural gas at the meter or at any point thereafter, electrical service from the unit's device to protect against excessive current to the main electrical panel, but not the installation of other gas or electric services for the devices, machinery or units.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Refrigeration and Refrigerants	17
Piping and Tubing	8
Condensers and cooling towers	4
Controls, Valves and Wiring	7
Walk-ins/Box Construction	2
Ducts and Ventilation	2
Test and Inspection	3
Gas	3
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org



Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Refrigeration and Air Conditioning*, Althouse, Turnquist, Bracciano, 2000, Goodheart-Willcox, ISBN: 1566377242
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** Code of Federal Regulations - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Industrial Refrigeration Handbook*, Wilbert F. Stoecker, 1998, McGraw-Hill, PO Box 182605, Columbus, OH 43218, ISBN: 0-07-061623-X

C-21B AIR CONDITIONING CONTRACTOR

SCOPE OF WORK

The installation, repair, service and maintenance of equipment, devices, machinery, units and related ductwork which use evaporation, refrigeration, boilers or combustion for the control of air temperatures in structures where people live, work or assemble or animals are kept.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	4
Insulation	1
Hangers and Supports	3
Sound, Vibration and Seismic Control	1
Heating and Cooling Principles	3
Refrigerants and Refrigeration	4
Load Calculations	6
Testing, Adjusting and Balancing	1
Controls	3
A/C and Heat Pump Equipment	4
Furnaces and Heaters	4
Chimneys, Flues and Vents	3
Combustion Air	2
Fuel Systems	8
Ducts	6
Evaporative Cooling	3
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org
- *NFPA 54 National Fuel Gas Code*, 1999, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may **not** contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Refrigeration and Air Conditioning*, Althouse, Turnquist, Bracciano, 2000, Goodheart-Willcox, ISBN: 1566377242
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *HVAC Duct Construction Standards-Metal and Flexible*, (SMACNA), 4201 Lafayette Center Dr, Chantilly, VA 20151, ISBN: 999424695X
- *Manual N*, 4th Edition, 1988, ACCA, 2800 Shirlington Rd, Ste 300, Arlington, VA 22206, (703) 575-4477, www.acca.org
- *Evaporative Air Conditioning Handbook*, 3rd Edition, 1997, John R. Watt, Will K. Brown, Prentice Hall PTR, Fairmont Press, 700 Indian Trail, Liburn, GA 30247, ISBN: 0-88173-193-5 FP

C-21C SHEET METAL CONTRACTOR

SCOPE OF WORK

The selection, cutting, shaping, fabrication and installation of sheet metal in such forms as cornices,

flashings, gutters, leaders, downspouts for rainwater, pans, kitchen equipment, ducts, louvers, patented chimneys and metal flues.

# of Questions	Minimum Passing Score	Time Allowed
40	28	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Ducts	20
Chimneys, Flues, Vents	4
Hoods and Ventilation Equipment and Devices	6
General Knowledge	6
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may **not** contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *HVAC Duct Construction Standards-Metal and Flexible*, (SMACNA), 4201 Lafayette Center Dr, Chantilly, VA 20151, ISBN: 999424695X
- *Sheet Metal*, 1995, Leo Meyer, American Technical Publishers
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)



C-21D REFRIGERATION AND AIR CONDITIONING MAINTENANCE CONTRACTOR

SCOPE OF WORK

The repair and replacement of any parts of existing units or systems of air-conditioning and refrigeration, including the compressors, motors, relays, coils, heat exchangers and other appurtenances and equipment, but not the replacement of complete condenser assemblies on remote systems, air handlers or any work that may alter the design of an existing system.

# of Questions	Minimum Passing Score	Time Allowed
60	42	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Systems/Components	20
Metering Devices/Troubleshooting	20
Controls and Wiring	10
Chilled Water	3
Refrigerants	3
Walk-in Refrigerators	1
Safety	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Refrigeration and Air Conditioning*, Althouse, Turnquist, Bracciano, 2000, Goodheart-Willcox, ISBN: 1566377242
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, **OR** *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Troubleshooting and Servicing Modern Air Conditioning and Refrigeration Systems* by John Tomczyk, 1995, ESCO Press, PO Box 521, Mount Prospect, IL 60056, ISBN: 1-930044-06-2

C-21E SOLAR AIR CONDITIONING CONTRACTOR

SCOPE OF WORK

The installation of the collectors, piping, storage and other equipment used in the conversion of solar energy to energy used for the control of air temperatures.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	10
System Design	15
Pumps and Storage Systems	5
Collectors	7
System Valves and Controls	3
Safety	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Plumbing Code*, 1997, *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite



Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Solar Water and Pool Heating Design and Installation Manual*, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu

C-21F CHILLED WATER CONTRACTOR PIPING

SCOPE OF WORK

The installation of the chiller, piping, pumps, storage tanks, coils, cooling tower and other equipment used in the production and use of chilled water for the control of temperatures.

# of Questions	Minimum Passing Score	Time Allowed
25	18	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Safety	5
Piping	10
Equipment	5
Valves and Controls	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the

examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Refrigeration and Air Conditioning*, Althouse, Turnquist, Bracciano, 2000, Goodheart-Willcox, ISBN: 1566377242
- *Mathematics for Plumbers and Pipefitters*, 7th Edition, 2007, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 1428304614
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-21G PIPING FOR HOT WATER CONTRACTOR

SCOPE OF WORK

The fabrication, installation, repair and removal of pipes, pumps, valves and other equipment used in the transfer of hot water for the control of temperatures.

# of Questions	Minimum Passing Score	Time Allowed
25	18	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
Safety	5
Piping	12
Equipment	7
Valves and Controls	1

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.



Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Modern Hydronic Heating for Residential and Light Commercial Buildings*, John Siegenthaler, P.E., 2004, 2nd edition, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 0-7668-1637-8
- *Mathematics for Plumbers and Pipefitters*, 7th Edition, 2007, Delmar/Thomson Learning, (800) 347-7707, www.delmarlearning.com, ISBN 1428304614
- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

C-23 DRILLING WELLS

SCOPE OF WORK

The board will grant to qualified applicants a license in the specialty of drilling wells and installing pumps, pressure tanks and storage tanks considered integral to water wells. The board designates such a license as a "classification C-23" license. A person who holds a classification C-23 license may install and repair water wells, pressure tanks, storage tanks and pumps by boring, drilling, excavating, casing, cementing, dewatering and cleaning to provide a supply of uncontaminated water.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
General Regulations	10
Drilling and Boreholes	5
Casings and Screens	6

Grouting and Sealing	6
Contamination Prevention	5
Testing	3
Safety and General Knowledge	4
Pumps and Tanks	6

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is CLOSED BOOK.

The following reference materials are not allowed in the examination center:

- *Water Well Driller's Beginning Training Manual 3rd Edition*, 1996, NFPA, 1 Batterymarch, Quincy, MA 02269, (480) 948-3363
- *Manual of Water Well Construction Practices*, 2nd Edition 1998 National Ground Water Association, 601 Dempsey Road, Westerville, OH 43081, (800) 551-7379, www.ngwa.com

C-37 SOLAR CONTRACTOR

SCOPE OF WORK

A person who holds a classification C-37 license may design, fabricate and install systems for the collection of solar energy to heat and cool water, air and chemicals.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	10
System Design	15
Pumps and Storage Systems	5
Collectors	7
System Valves and Controls	3
Safety	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become



available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 0733-2335 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Solar Water and Pool Heating Design and Installation Manual*, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu

C-37A SOLAR WATER HEATING CONTRACTOR

SCOPE OF WORK

The installation of systems for the collection of solar energy to heat water for potable uses, but not the installation of pipes or fixtures other than water heaters and storage tanks designed for the use of water so heated.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	10
System Design	15
Pumps and Storage Systems	5
Collectors	7
System Valves and Controls	3
Safety	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Plumbing Code*, 1997, *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Solar Water and Pool Heating Design and Installation Manual*, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu

C-37B SOLAR SPACE HEATING

SCOPE OF WORK

The installation of systems for the collection of solar energy to heat water or air which is in turn used to heat structures which house persons, animals or inanimate objects including storage, piping and heat exchangers, but excluding equipment for pools.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours



CONTENT OUTLINE

Subject Area	# of Items
Piping	10
System Design	15
Pumps and Storage Systems	5
Collectors	7
System Valves and Controls	3
Safety	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Plumbing Code*, 1997, *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Solar Water and Pool Heating Design and Installation Manual*, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu

C-37C SOLAR AIR CONDITIONING CONTRACTOR

SCOPE OF WORK

The installation of the collectors, piping, storage and other equipment used in the conversion of solar energy to energy

used for the control of air temperatures.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	10
System Design	15
Pumps and Storage Systems	5
Collectors	7
System Valves and Controls	3
Safety	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *Uniform Plumbing Code*, 1997, *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Code of Federal Regulations* - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR *Code of Federal Regulations* - 29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
- *Solar Water and Pool Heating Design and Installation Manual*, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu



C-37D SOLAR POOL HEATING CONTRACTOR

SCOPE OF WORK

The installation of the collectors, piping and heat exchangers used to heat swimming pools and spas with solar energy, but not the plumbing of swimming pools or the installation of their equipment.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours

CONTENT OUTLINE

Subject Area	# of Items
Piping	10
System Design	15
Pumps and Storage Systems	5
Collectors	7
System Valves and Controls	3
Safety	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- Uniform Plumbing Code, 1997, *Uniform Plumbing Code*, 1997, International Association of Plumbing and Mechanical Officials (IAPMO), available from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, (800) 786-4452, www.iccsafe.org, ISBN: 0733-2335.

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- Code of Federal Regulations - 29 CFR Part 1926 Revised as of 2004 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 888-293-6498, www.osha.gov, OR Code of Federal Regulations -

29 CFR Part 1926 Selections as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)

- Solar Water and Pool Heating Design and Installation Manual, Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703, (321) 638-1015, www.fsec.ucf.edu

C-38 LIQUEFIED PETROLEUM AND NATURAL GAS EQUIPMENT CONTRACTOR

SCOPE OF WORK

The installation of pipes from the source of supply of liquefied petroleum or natural gas into a building or other structure and the installation of the related vents, the installation of appliances and equipment requiring connection to a supply of liquefied petroleum or natural gas, the fabrication and installation of systems for the heating of air with liquefied petroleum or natural gas and for circulating the air.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Natural Gas Piping	12
LP Gas Piping	12
Chimneys Flues and Vents	10
Appliance Installation	5
Sizing and Estimating	5
Testing and Inspection	3
Combustion Air	3

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- Uniform Mechanical Code, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org
- NFPA 58 Liquid Petroleum Gas Code, 2001, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org



Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- NFPA 54 National Fuel Gas Code, 1999, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

C-41 FIRE PROTECTION CONTRACTOR

SCOPE OF WORK

The fabrication, installation, alteration, repair and service of fire protection systems using water, including required pressure and storage tanks, fire pumps and drivers, sprinkler heads and nozzles, and all associated valves and piping. Included in this classification is control wiring, any required excavation, backfilling and grading, and piping to a water supply which is not on the premises but is adjacent to the property with the fire protection system, the fabrication, installation, repair and service of fire protection systems using foam, gas or dry chemicals, including pressurized storage tanks, valves, associated piping and sensing and control devices, the installation, alteration, repair and servicing of electrical sensors and alarms used to detect heat and smoke, including all appurtenances and related wiring.

# of Questions	Minimum Passing Score	Time Allowed
90	63	3 Hours

CONTENT OUTLINE

Subject Area	# of Items
Fire Sprinkler Systems	20
Fire Sprinkler - Wet and Dry Chemical Systems	17
Fire Sprinkler - Standpipe	10
Fire Prevention	7
Code Compliance	3
Fire Alarms	23
General Regulations	10

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- NFPA 13 - Installation of Sprinkler Systems, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 14 - Installation of Standpipe and Hose Systems, 2003, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 17 - Dry Chemical Extinguishing Systems, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 72 - National Fire Alarm Code or National Fire Alarm Code Handbook, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 11 - Standard for Low-Expansion Foam, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems, 2000, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 25: Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- National Electrical Code or National Electrical Code Handbook, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9
- NV Fire Marshall Code, Chapter 477

C-41A AUTOMATIC FIRE SPRINKLERS CONTRACTOR

SCOPE OF WORK

The fabrication, installation, alteration, repair and service of fire protection systems using water, including required pressure and storage tanks, fire pumps and drivers, sprinkler heads and nozzles, and all associated valves and piping. Included in this classification is control wiring, any required excavation, backfilling and grading, and piping to a water supply which is not on the premises but is adjacent to the property with the fire protection system.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours



CONTENT OUTLINE

Subject Area	# of Items
Sprinkler Systems	16
Standpipe Systems	16
Inspection, Testing and Maintenance	8
General Regulations	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- NFPA 13 - Installation of Sprinkler Systems, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 14 - Installation of Standpipe and Hose Systems, 2003, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 25: Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- Nevada Fire Marshall Code Chapter 477

C-41B FIXED FIRE EXTINGUISHING SYSTEMS CONTRACTOR

SCOPE OF WORK

The fabrication, installation, repair and service of fire protection systems using foam, gas or dry chemicals, including pressurized storage tanks, valves, associated piping and sensing and control devices.

# of Questions	Minimum Passing Score	Time Allowed
45	32	1.5 Hours



CONTENT OUTLINE

Subject Area	# of Items
Dry Chemical Systems	14
Carbon Dioxide Systems	12
Foam Systems	7
Clean Agent Systems	7
General Regulations	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- NFPA 11 - Standard for Low-Expansion Foam, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems, 2000, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 17 - Dry Chemical Extinguishing Systems, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems, 2000 Ed, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- NV Fire Marshall Code, Chapter 477

C-41C FIRE DETECTION CONTRACTOR

SCOPE OF WORK

The installation, alteration, repair and servicing of electrical sensors and alarms used to detect heat and smoke, including all appurtenances and related wiring.

# of Questions	Minimum Passing Score	Time Allowed
55	39	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
General Electrical Knowledge	5
Wiring	8
Grounding	3
Power Supply	5
Detectors	15
Alarms Notification	14
General Regulations	5

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference materials are allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9
- *NFPA 101 Life Safety Code*, 2003, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org
- *NFPA 72 - National Fire Alarm Code or National Fire Alarm Code Handbook*, 2002, National Fire Protection Assn, 1 Batterymarch, Quincy, MA 02269, (617) 770-3000, www.nfpa.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *Fire Alarm Signaling Systems Handbook*, 1994, 2nd edition, Bukowski & O'Laughlin, National Fire Protection Association, 1 Batterymarch, Quincy, MA 02269, (480) 948-3363, ISBN: 0-87765-399-2
- *Certified Alarm Technicians Manual - Level 1*, 2001, National Burglar and Fire Alarm Association, National Training School, (866) 636-1687, www.alarm.org
- *Nevada Fire Marshall Code Chapter 477*

C-42 CABLE TELEVISION CONTRACTOR

SCOPE OF WORK

A person who holds a classification C-42 license may construct, alter or improve community antenna television systems.

# of Questions	Minimum Passing Score	Time Allowed
35	25	1 Hour

CONTENT OUTLINE

Subject Area	# of Items
NEC	10
NESC	2
Cable-General	23

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

- *National Electrical Code or National Electrical Code Handbook*, 1999, Earley, Sheehan, Caloggero, National Fire Protection Assoc, (617) 770-3000, www.nfpa.org, ISBN: 0-87765-437-9

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER. References may be tabbed/indexed with permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.

The following reference materials are not allowed in the examination center:

- *National Electrical Safety Code (C2-1997)*, Institute of Electrical Electronics Engineers, Inc., 345 East 47th Street, New York, NY 10017-2394
- *Cable Television Handbook*, 1997, Bartlett, Eugene R., McGraw-Hill, PO Box 182605, Columbus, OH 43218





Read the Candidate Information Bulletin before filling out this registration form. You must provide all information requested and submit the appropriate fee. PLEASE TYPE OR PRINT LEGIBLY. Registration forms that are incomplete, illegible, or not accompanied by the proper fee will be returned unprocessed. Registration fees are not refundable or transferable.

- ☐ One Examination Portion (\$85) ☐ Two Examination Portions (\$130)
(The \$130 fee is only applicable if the 2nd exam is the CMS. If you are taking 2 trades, eg., C3 and C4, they would be \$85 per exam.)

- Note: You may only take 2 portions for a maximum of 6 hours in one registration.**

11. **Affidavit:** *I certify that the information provided on this registration form (and/or telephonically to PSI) is correct. I understand that any falsification of information may result in denial of licensure. I have read and understand the examination information bulletin.*



Signature: _____

Date: _____

IF YOU ARE REGISTERING BY MAIL OR FAX, SIGN AND DATE THIS REGISTRATION FORM ON THE LINES PROVIDED.

Complete and forward this registration form with the applicable examination fee to:

PSI licensure:certification * ATTN: Examination Registration NV CO

3210 E Tropicana * Las Vegas * NV * 89121

Fax (702) 932-2666 * (800) 733-9267 * TTY (800) 735-2929

www.psiexams.com

To speed up your registration processing, please write on the outside of the envelope "ATTENTION: Examination Registration NV CO".



BOOKS AND MORE ARE NOW AVAILABLE AT THE PSI ONLINE STORE!

To place an order for one or more of the following items listed, you may:

- Order online at www.psionlinestore.com
- Call the PSI Online store toll-free at (866) 589-3088

Note: prices are available online at www.psionlinestore.com

☐	<u>Nevada Construction Business and Law Manual</u>
☐	<u>29 CFR Part 1926 Selections</u>
☐	<u>Carpentry and Building Construction</u>
☐	<u>NFPA 13: Installation of Sprinkler Systems</u>
☐	<u>NFPA 72 - National Fire Alarm Code</u>
☐	<u>NFPA 14: Installation of Standpipe, Private Hydrant, and Hose Systems</u>
☐	<u>NFPA 17: Standard for Dry Chemical Extinguishing Systems</u>
☐	<u>NFPA 25: Inspection, Testing and Maintenance of Water-Based Fire Protection Systems</u>
☐	<u>Fire Alarm Signaling Systems</u>
☐	<u>Modern Hydronic Heating for Residential and Light Commercial Buildings</u>
☐	<u>Landscaping Principles and Practices</u>
☐	<u>Mathematics for Plumbers and Pipefitters</u>
☐	<u>HVAC Pump Handbook</u>
☐	<u>Modern Masonry - Brick, Block, Stone</u>

Please note: Inventory and pricing subject to change without notice.

- You may also place a checkmark next to the items that you would like to order, and mail or fax this form to PSI (be sure to include your contact information). A Customer Service Rep will call you to place the order.

Mail or FAX to:
PSI licensure:certification ** 3210 E Tropicana * Las Vegas * NV * 89121 (Attn Shipping)
Fax (702) 932-2668

Name: _____

Address: _____

City _____ State _____ Zip _____

Phone Number: _____

**You may also purchase these references at the PSI Tropicana Site
3210 E Tropicana, Las Vegas, NV 89121, Monday - Friday 9am - 5pm
CASH is not accepted**



PSI LICENSURE: CERTIFICATION

3210 E TROPICANA
LAS VEGAS, NV 89121

FIRST CLASS MAIL

