



INTERNATIONAL
CODE
COUNCIL®

Minneapolis, Minnesota Contractor/Trades Examination Information Bulletin

PUBLISHED September 24, 2024

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

International Code Council Vision

Creating safe, affordable, and sustainable buildings and communities.

International Code Council Mission

Provide the codes, tools, and resources that members rely on,
building safety professionals turn to, and manufacturers and the public trust.

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

Contents are subject to change at any time.

For the most updated information, visit the [Exam Catalog](#).

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

customersuccess@iccsafe.org

www.iccsafe.org/contractor

SUMMARY OF BULLETIN CHANGES

Date of Change	Section Affected	Revision
November 15, 2021	Reformatted Entire Bulletin	Reformatted Entire Bulletin
July 29, 2022	Minneapolis, MN Contractor/Trades Examination Bulletin – Before the Exam	Corrected Exam Retake period
February 21, 2024	Minneapolis, MN Contractor/Trades Examination Bulletin	Added Jurisdiction Contact Information
March 21, 2024	Minneapolis, MN Contractor/Trades Examination Bulletin	Language added by MN Client regarding exam references.
August 14, 2024	Minneapolis, MN Contractor/Trades Examination Bulletin	MN temporarily authorized the ability to utilize any copyrighted, bound book at a test site. Exam questions will only come from the listed approved references, and exam appeals may only be based on the listed approved references.
September 23, 2024	Minneapolis, MN Contractor/Trades Examination Bulletin	Revised verbiage and instructions on the After the Exam question: "How do I change my name and address?"
September 24, 2024	Minneapolis, MN Contractor/Trades Examination Bulletin	Updated Duplicate Result Letter verbiage to reflect exams taken after 1/1/2014 can receive a duplicate result letter at no charge from Pearson VUE.

Use the checklists and information summaries in this bulletin to familiarize yourself with the testing process. Be sure to completely read this bulletin before scheduling your examination. You are responsible for following all policies and regulations found in this document. Not reading this bulletin does not release your responsibility for following these procedures.

About Code Council Contractor/Trades Testing

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

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

COPYRIGHT © 2021

by

INTERNATIONAL CODE COUNCIL, INC.

ALL RIGHTS RESERVED. This International Code Council National Contractor/Trades Examination Information Bulletin is a copyrighted work owned by the International Code Council, Inc. Without advance permission from the copyright owner, no part of this book may be reproduced, distributed, or transmitted in any form or by any means, including, without limitation, electronic, optical, or mechanical means (by way of example and not limitation, photocopy or recording by or in an information storage retrieval system). For information on permission to copy material exceeding fair use, please contact: International Code Council, Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Phone: 1-888-ICC-SAFE (422-7233).

Trademarks: "International Code Council" and the "International Code Council" logo are trademarks of the International Code Council, Inc.

General Testing Information

The purpose of this bulletin is to provide you with information regarding how to schedule and take your contractor/trades examination. Prior to scheduling a test with this program, you must first make a license application with the City of Minneapolis. Applications are available at: <https://www2.minneapolismn.gov/business-services/licenses-permits-inspections/construction-permits-certificates/construction-code-rules-enforcement/competency-cards/>. You may contact the City at the following address:

City of Minneapolis
Comp Card Applications
250 South 4th Street
Room 300
Minneapolis, MN 55145
(612) 673-3000

If your application is satisfactory, the Code Council will be notified of your eligibility to test. Once you receive notification of approval from the licensing agency, you may apply for and schedule your examination. Authorization is effective for one year after eligibility is determined.

Important Note: It is recommended that you wait at least 24-48 hours after receiving your notice of approval before you try to schedule your examination. This will ensure the Code Council and its computer testing partner have had time to process your eligibility record.

General Information and Frequently Asked Questions

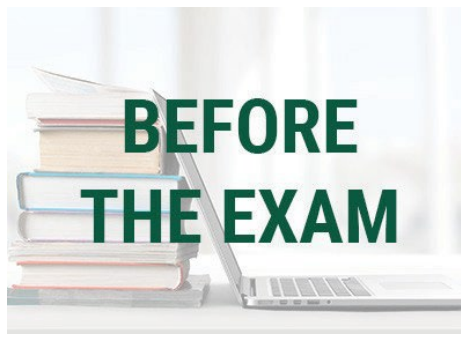
The purpose of this bulletin is to provide you with information regarding how to schedule and take your contractor/trades examination. Prior to scheduling a test with this program, you should first consult with your local or state licensing agency to determine which examination you should take. Some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

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

Table of Contents

International Code Council Vision	1
International Code Council Mission	1
About Code Council Contractor/Trades Testing	3
General Information and Frequently Asked Questions	5
Before the Exam.....	6
Before Purchasing an Exam	6
After Purchasing an Exam.....	8
Exam Day.....	10
After the Exam.....	122
Minneapolis, Minnesota Contractor/Trades Examination Information	13

Note: Examination requirements, including registration/scheduling, dates, locations, fees, and references are subject to change. Please make sure that you have the most current information before registering for/scheduling any examination. For up-to-date information on Code Council examinations, visit the [Exam Catalog](#) or call 1-888-ICC-SAFE (422-7233). For fastest service, for general questions, dial 0; for specific information on your certification, dial ext. 5524.



Before Purchasing an Exam

What examination do I need to take?

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

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

Some licensing agencies may require you to apply through them prior to testing with ICC, while others may not. Please contact your local licensing agency or review the appropriate National Contractor/Trades Examination Information Bulletin on the Code Council's [website](#).

How often can I test?

You must wait 60 days before retaking a failed exam. It is strongly recommended that you allow time to study the approved references before registering to test a second time.

What examination methods are available?

- **Pearson VUE** - Traditional, computer-based testing occurs at test sites administered by Pearson VUE frequently at over 350 sites across the nation. To locate test sites in your area, visit the [Pearson VUE](#) website for an updated listing of sites. Be aware that test sites are subject to change.

What references or code books are the exams based on?

The approved references for each exam are listed in the Examination Outlines section of this bulletin. For the most up- to-date bulletin information, visit the [Exam Catalog](#).

Are the examinations open book?

Most Contractor/Trades exams are open book. Refer to the Examination Outlines section of this bulletin for open/ closed book requirements for specific exams. For the most up-to-date bulletin, visit the [Exam Catalog](#). Additional policies governing the use of references can be found later in this bulletin.

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

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

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

Because of the time constraints, you will not have time to look up all the answers. For those answers you must look up, you must be VERY familiar with the references to avoid wasting

time searching for information. First impressions are often the most accurate, but you may change your answers if time allows.

How long are the examinations?

The length and allowed time vary depending upon the subject matter. To get the most updated information on examinations, visit the [Exam Catalog](#).

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

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

What score do I need to pass the test?

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

When will I receive my results?

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

Do I have to be a computer whiz?

Candidates are not required to have any computer knowledge to take the examination.

- **Pearson VUE** - before you begin your test, you may take up to 15 minutes to practice with the sample questions. Timing of the examination does not begin until you look at the first question of the actual examination. You will be allowed to change your answers, mark answers for review, go back to skipped questions and, time permitting, review your test.

How do I pay for my exam?

- **Pearson VUE** - Examination fees must be paid by credit card, debit card (issued through VISA or MasterCard) or electronic check at the time a reservation is made, NOT at the test center. Candidates who do not have or do not wish to use a credit card, debit card, or personal checking account may choose to prepay their examination fees using a voucher. Vouchers can be purchased online at [ICC Contractors Vouchers](#) by credit card, either singly or in volume. To redeem a voucher as payment when scheduling a test, simply indicate "voucher" as the payment method and provide the voucher number.

All exam vouchers are pre-paid, non-refundable, and non-returnable.

Vouchers expire twelve (12) months from the date they are issued, and voucher expiration dates cannot be extended. The exam must be taken by the expiration date printed on the voucher.

After Purchasing an Exam

How do I schedule/register for an exam?

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

administration.

For **computer-based testing** through Pearson VUE you may schedule an examination online at [PearsonVUE](#). Follow the directions under “Contractor/Trade Licensing.”

You may also schedule an examination over the phone by contacting Pearson VUE at 1-877-234-6082, following the scheduling procedures listed in this bulletin.

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

- New Year’s Day
- Martin Luther King, Jr. Day
- Memorial Day
- Independence Day
- Labor Day
- Veteran’s Day
- Thanksgiving (including the following Friday)
- Christmas Day

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

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

How do I reschedule/cancel my exam?

- **Pearson VUE** - You must notify Pearson VUE two business days before your scheduled examination; an administrative fee will incur. Click [here](#) or call 1-877-234-6082.

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

There are no refunds for examinations not taken. If, on the day you are scheduled to test, you are unable to attend the examination for which you were scheduled, you may be excused without monetary penalty for the following reasons:

- Documented illness, either yourself or immediate family member;
- Death in the immediate family;
- Disabling traffic accident;
- Court appearance or jury duty; or
- Military duty.

Written verification and supporting documentation for excused absences must be submitted to the Pearson VUE Program Coordinator by phone at 877-234-6082 within fourteen (14) days of the original examination date.

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

If there's an emergency, we ask that you contact Pearson Vue within 48 hours of your scheduled exam. If the emergency in question does not allow for the 48 hours' notice, please [contact us](#) and we're happy to discuss your situation with you.

What if I need testing accommodations?

If you have a disability that prohibits you from taking the examination under standard conditions, you may request special arrangements.

- **PearsonVUE** - Call 1-800-466-0450 or send an email to accommodationspearsonvue@pearsonvue.com requesting special testing services.

How do I access my passed exam results on the ICC website?

Visit [here](#) for the Contractor Exam pass link.



The rules and procedures below are strictly enforced at all Code Council examinations. Following these rules guarantees the security of examination materials, provides reliable test results, and increases the public's trust of certified professionals.

Identity Verification

All candidates are required to present a government issued photo identification.



The identification must:

- Have the same legal first and last name that matches the exam record,
- Be original (no photo copies)
- Must be valid (not expired)
- Contain a signature

NOTE: Proxy testing is a violation of the ICC administrative rules. Candidates who participate in proxy testing may be permanently banned from testing and subject to legal action.

If you are unable to present identification as required by the Code Council, or have questions about what will be allowed, you must call ICC or Pearson VUE prior to your scheduled exam to make other arrangements.

Candidate Behavior

Candidates are expected to always remain professional and treat the proctors with respect.

All ProctorU and PearsonVUE staff are tasked with ensuring examination integrity. They are well-trained and treat candidates with respect, and in turn, expect the same level of respect from candidates. Threatening a proctor or interfering with the administration of an examination at any time may be considered a criminal offense and punishable by law.

NOTE: Proctors cannot discuss contents of the exam or reference materials with a candidate.

Proctors have the right to end an examination administration at any time for examination anomalies including, but not limited to, the following behaviors:



- Gives or receives help during an examination
- Creating a disturbance
- Copying or attempts to copy examination questions or answers
- Is found to have prohibited materials (phones, recorders, loose papers, etc.) during the examination
- Talks during the examination
- Becomes belligerent or threatens the proctor, test site administration, or other candidates.

Agree to ICC Rules

Prior to launching the examination, candidates are required to read and agree to follow all ICC rules, policies, and procedures.

This includes the following:



- [Candidate Agreement](#)
- [Certification Program Rules of Procedure](#)
- [ICC Code of Ethics](#)

What can I bring to the exam?

What is Allowed:

- Reference material(s) - please make sure the reference(s):
 - Are bound (either original bound book, three-ring binder, or stapled). Photocopies of copyrighted materials are not allowed.
 - All notes are written in ink or highlighted
 - Any tabs are permanently attached (tabs that can't be removed without destroying the page)
- Magnifying glass
- Eyeglasses, if necessary
- Architects' scale or ruler
- Foreign language/English translation dictionaries
- Battery-operated, basic four-function calculator that is:
 - Limited to addition, subtraction, multiplication, division, square roots, and percentages
 - Nonprogrammable
 - Not capable of storing examination information
 - No ribbon or paper printing capabilities

What is not Allowed:

- No food or drink (unless approved through testing accommodations)
- Any kind of writing instruments, writing paper, or briefcases

Note: PRONTO candidates utilize an on screen "Global Notepad" during their examination. PearsonVUE candidates are supplied with a small whiteboard and a marker. This marker can ONLY be used to write on the white board. Candidates using the marker/pen to write in their reference materials are subject to disciplinary action by the CC.

- Personal items such as purses, wallets, or watches
- Calculators with print capability and/or that store formulas
- Copying, recording, or photo devices
- No electronic devices other than the device utilized for the examination (unless approved through testing accommodations)



How do I request a duplicate pass letter?

If you took an ICC Contractor/Trades examination at a Pearson VUE Test Center on or after January 1, 2014, please contact Pearson VUE via phone (1-877-234-6082) or chat to request a duplicate letter at no charge. All other candidates, please visit the [ICC Forms Library](#) > General Requests > and complete the [Replacement Result Letter](#).

Can my exam score be cancelled?

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

- Giving or receiving assistance with answers during testing
- Using unauthorized materials during testing
- Failing to abide by the rules presented or directions from the proctor(s)

In cases of examination irregularities which are suspected at testing centers, the scores of the individual(s) involved will not be released unless approved by the Code Council. Additional sanctions may be authorized by the Board, which may include restrictions on retesting for up to three (3) years.

How do I change my name and address with ICC?

NOTE: Your ICC email address is the Pearson VUE email address used to register for an ICC Contractor/Trades examination. To update your candidate demographic information (Address, Phone Number, Email, and Legal Name), log in to your myICC account. Click [here](#) for additional information.

If you are unable to access your myICC account, please contact ICC at 1-888-422-7233 ext. 5524 or via email at customersuccess@iccsafe.org.

How do I make comments about an exam I took?

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

To have Code Council Assessment Center staff review comments or challenges on specific exams, exam items, or any issues encountered during your examination, you must submit a Contractor Appeals form to the Code Council.

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

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

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

Comment/Challenge forms must be sent to the following mailing or email address:

International Code Council
ATTN: Client Relationship Manager
900 Montclair Road
Birmingham, AL 35213
Email: appeals@iccsafe.org

Minneapolis, Minnesota Contractor/Trades Examination Information

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

NOTE: Effective August 14, 2024, MN exam candidates may utilize any copyrighted, bound book during an exam administration at a test site. Exam questions will only come from the listed approved references, and exam appeals may only be based on the listed approved references.

495 Minnesota (Minneapolis) Master Fuel Gasfitter		Pricing
Passing Score: 75%		
100 multiple-choice questions		Pearson VUE: \$115
Open book – 3-hour time limit		PRONTO: N/A
Content Area	%	Reference
General Knowledge	25%	2020 Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 62.2 – 2016 and ANSI/ASHRAE Standard 154-2016
General Regulation and Safety	25%	
Components	10%	AGA Fundamentals of Gas Combustion, 3 rd Ed.
Sizing and Designing	20%	2021 NFPA 54: National Fuel Gas Code
Installations	15%	
Gas Venting	10%	

496 Minnesota (Minneapolis) Journeyman Fuel Gasfitter		Pricing
Passing score: 70%		
80 multiple-choice questions		Pearson VUE: \$115
Open book – 3-hour time limit		PRONTO: N/A
Content Area	%	Reference
General Knowledge	25%	2020 Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 62.2-2016 and ANSI/ASHRAE Standard 154-2016
General Regulations	17%	
Components	12%	AGA Fundamentals of Gas Combustion, 3 rd Ed.
Sizing and Designing	19%	
Installations	15%	
Gas Venting	12%	

NOTE: Effective August 14, 2024, MN exam candidates may utilize any copyrighted, bound book during an exam administration at a test site. Exam questions will only come from the listed approved references, and exam appeals may only be based on the listed approved references.

Scope: Tests a candidate’s knowledge of installation, repair, maintenance, or extension of any plumbing system, including drain, waste, vents, water supply, and fixtures, and also install, maintain, or repair gas piping, appliances, vents, tanks, and other related appurtenances within the scope of the Minnesota Plumbing Code, and Minneapolis Ordinance Chapter 278.

497 Minnesota (Minneapolis) Plumber Gasfitter Master		
Passing score: 75%		Pricing
100 multiple-choice questions		PearsonVUE: \$115
Open book – 2-1/2-hour time limit		PRONTO: N/A
Content Area	%	Reference
Plumbing – General Knowledge	12%	2020 Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 154-2016 and ANSI A117.1
Plumbing – General Regulations	10%	2020 Minnesota Plumbing Code
Plumbing Fixtures	5%	2020 Minnesota Accessibility Code
Water Supply and Distribution	5%	
Drain, Waste, and Vent	5%	
Storm Drainage	5%	
Backflow Prevention	8%	
Gas Piping	15%	
Fuel Gas – Venting	15%	
Fuel Gas – General Regulations	20%	

498 Minnesota (Minneapolis) Plumber Gasfitter Journeyman		
Passing score: 70%		Pricing
100 multiple-choice questions		PearsonVUE: \$115
Open book – 2-1/2-hour time limit		PRONTO: N/A
Content Area	%	Reference
Plumbing – General Knowledge	12%	2020 Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 62.2-2016 and ANSI/ASHRAE Standard 154-2016
Plumbing – General Regulations	10%	2020 Minnesota Plumbing Code
Plumbing Fixtures	5%	2020 Minnesota Accessibility Code
Water Supply Systems	5%	
Drain, Waste, and Vent	5%	
Roof Drains	5%	
Backflow Prevention	8%	
Gas Piping	15%	
Fuel Gas – Venting	15%	
Fuel Gas – General Regulations	20%	

NOTE: Effective August 14, 2024, MN exam candidates may utilize any copyrighted, bound book during an exam administration at a test site. Exam questions will only come from the listed approved references, and exam appeals may only be based on the listed approved references.

768 Minnesota (Minneapolis) Journeyman Refrigeration		Pricing
Passing score: 70%		
70 multiple-choice questions		PearsonVUE: \$115
Open book – 3-hour time limit		PRONTO: N/A
Content Area	%	Reference
ACR	45%	2020 Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 62.2 – 2016 and ANSI/ASHRAE Standard 154-2016
Commercial Refrigeration Systems	15%	Modern Refrigeration and Air Conditioning, 18 th or 19 th edition
Controls	15%	
Piping, Tubing, and Related Equipment	10%	2019 ASHRAE 15: Safety Standards for Refrigeration Systems
Refrigeration Gases	15%	

769 Minnesota (Minneapolis) Master Refrigeration		Pricing
Passing score: 75%		
80 multiple-choice questions		PearsonVUE: \$115
Open book – 3-hour time limit		PRONTO: N/A
Content Area	%	Reference
ACR	40%	2020 Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 62.2-2016 and ANSI/ASHRAE Standard 154-2016
Commercial Refrigeration Systems	25%	Modern Refrigeration and Air Conditioning, 18 th Edition
Controls	10%	
Piping, Tubing, and Related Equipment	10%	Refrigeration and A/C Technology, 8 th Edition
Refrigeration Gases	15%	

NOTE: Effective August 14, 2024, MN exam candidates may utilize any copyrighted, bound book during an exam administration at a test site. Exam questions will only come from the listed approved references, and exam appeals may only be based on the listed approved references.

773 Minnesota (Minneapolis) Master Warm Air Ventilation Pricing
Passing score: 75%
 80 multiple-choice questions PearsonVUE: \$115
 Open book – 4-hour time limit PRONTO: N/A

Content Area	%	Reference
General	5%	2004 ASHRAE 62.1, <i>Ventilation for Acceptable Indoor Air Quality</i>
Residential Make Up Air	10%	2005 SMACNA, <i>HVAC Duct Construction Standards</i>
Ventilation	10%	2014 NFPA 96, <i>Standard for Ventilation Control and Fire Protection</i>
Duct Construction and Calculations	30%	2020 <i>Minnesota Mechanical and Fuel Gas Code</i>
Commercial Kitchens	30%	
Combustion Air/Venting	15%	

774 Minnesota (Minneapolis) Journeyman Warm Air Ventilation Pricing
Passing score: 70%
 100 multiple-choice questions PearsonVUE: \$115
 Open book – 3-hour time limit PRONTO: N/A

Content Area	%	Reference
General	15%	2020 <i>Minnesota Mechanical and Fuel Gas Code with ANSI/ASHRAE Standard 62.2-2016 and ANSI/ASHRAE Standard 154-2016</i>
Warm Air Heating & Insulation	30%	2021 NFPA 96 <i>Standard for Ventilation and Control and Fire Protection</i>
Ventilation	20%	2020 <i>Minnesota Energy Code</i>
Duct Construction	10%	2020 SMACNA, <i>HVAC Duct Construction Standards</i>
Combustion Air	25%	

NOTE: Effective August 14, 2024, MN exam candidates may utilize any copyrighted, bound book during an exam administration at a test site. Exam questions will only come from the listed approved references, and exam appeals may only be based on the listed approved references.

775 Minnesota (Minneapolis) Master Steam and Hot Water		Pricing
<u>Passing score: 75%</u>		
100 multiple-choice questions		PearsonVUE: \$115
Open book – 3-hour time limit		PRONTO: N/A
Content Area	%	Reference
General	25%	2020 <i>Minnesota Mechanical and Fuel Gas Code</i>
Piping and Equipment Installation	20%	<i>Low Pressure Boilers</i> , 3 rd ed., Frederick M. Steingress
Pipes, Valves, Fittings, Accessories	10%	2008 ASHRAE Handbook <i>Hydronic Heating</i> , Ch. 10 and 12
Hydronics (Hot water & Chilled water)	15%	
Steam	20%	
Controls	10%	

776 Minnesota (Minneapolis) Journeyman Steam and Hot Water		Pricing
<u>Passing score: 70%</u>		
100 multiple-choice questions		PearsonVUE: \$115
Open book – 3-hour time limit		PRONTO: N/A
Content Area	%	Reference
General	25%	2020 <i>Minnesota Mechanical and Fuel Gas Code</i>
Piping and Equipment Installation	20%	<i>Low Pressure Boilers</i> , 3 rd ed., Frederick M. Steingress
Pipes, Valves, Fittings, Accessories	10%	2008 ASHRAE Handbook <i>Hydronic Heating</i> , Ch. 10 and 12
Hydronics (Hot water & Chilled water)	15%	
Steam	20%	
Controls	10%	