

### PSI Services LLC <a href="https://test-takers.psiexams.com/tdlnrp">https://test-takers.psiexams.com/tdlnrp</a> Email: TDLRSupport@psionline.com

#### TEXAS DEPARTMENT OF LICENSING AND REGULATION

## AIR CONDITIONING AND REFRIGERATION CANDIDATE INFORMATION BULLETIN



Examination Procedures	Reporting to the Examination Site	3
Internet Scheduling	Required Identification	
Telephone Scheduling	Security Procedures	
Canceling an Examination 2	Taking the Examination by Computer	
Missed Appointment or Late Cancellation 3	Examination Review	
Exam Accommodations 3	Examination Site Locations	5
Foreign Languages 3	Examination References	7
Emergency Examination Site Closing 3	Examination Content Outlines	9
Emergency Examination Site Closing 3	Examination Content Outlines	9

Please refer to our website to check for the most updated information at https://test-takers.psiexams.com/tdlnrp

Copyright © 2024 by PSI Services LLC

Updated 9/4/2024

#### **EXAMINATION SCHEDULING PROCEDURES**

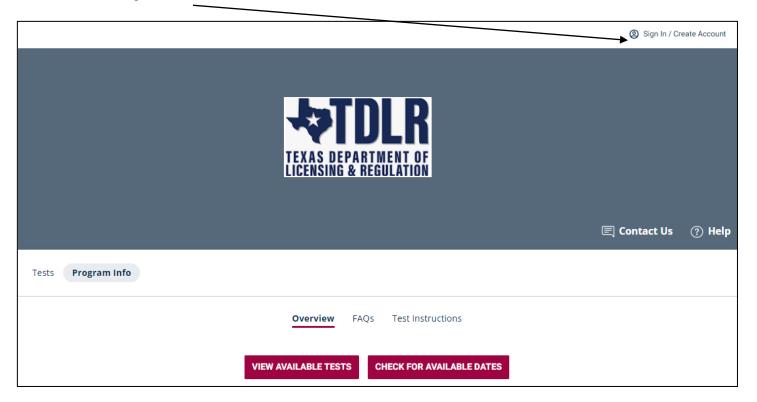
The Texas Department of Licensing & Regulation (TDLR) has contracted with PSI Services LLC (PSI) to deliver its examinations.

Upon TDLR approval of eligibility, you will receive an email confirmation with instructions for scheduling an appointment to take the examination. (If you have not provided an email address, you will receive a postcard via U.S. Mail with this information). You are allowed to test unlimited through your eligibility period.

#### **ON-LINE SCHEDULING VIA WEBSITE**

For the fastest and most convenient examination scheduling process, register for your examinations online by accessing PSI's registration Website: (https://test-takers.psiexams.com/tdlnrp)

1. Select Sign In/Create Account.

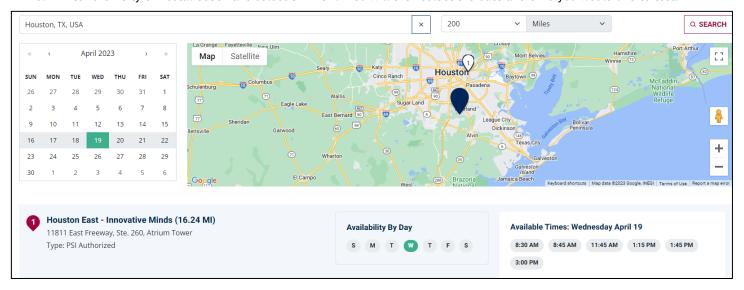


2. You will be prompted to CREATE AN ACCOUNT with PSI.

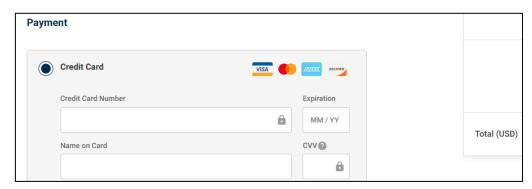
The first and last name must match exactly with your current, valid, government-issued ID.

TDLR ID#*	
First Name *	Last Name *
Middle Name	Generation
Email *	
Password *	Your password must contain:
Password "	<ul> <li>At least one capital letter A-Z</li> </ul>
	<ul> <li>At least one lower case letter a-z</li> </ul>
	<ul> <li>At least one number 0-9</li> </ul>
Confirm Password *	At least one special character I@#V\$%V^&\ At least 8 and up to 32 characters

3. Enter the "City or Postal Code" and select SEARCH. You will then select the date and time you would like to test.



4. You are now ready to pay.



5. Once payment has been made you will receive a message confirming the test center, booked date, and booked time.



#### TELEPHONE REGISTRATION

For telephone registration, you will need a valid credit card (Visa, MasterCard, American Express or Discover). PSI registrars are available at (833) 333-4741, Monday through Friday between 6:30 am and 9:00 pm, and Saturday-Sunday between 8:00 am and 4:30 pm, Central Time, to receive your payment and schedule your appointment for the examination.

#### CANCEL OR RESCHEDULE 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 (833) 333-4741 or use the PSI website.

Note: A voice mail or email message is not an acceptable form of cancellation. Please use the PSI Website or call PSI to speak directly 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.

#### **EXAM ACCOMMODATIONS**

All PSI examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and exam accommodations will be made in meeting a candidate's needs. A candidate with a disability or a candidate who would otherwise have difficulty taking the examination should request for alternative arrangements by Clicking Here. This form also includes out-of-state testing requests.

#### **FOREIGN LANGUAGES**

All air conditioning and refrigeration examinations are available in English and Spanish for no additional cost. To take one of these examinations you must indicate your language preference when you schedule your examination.

For languages other than English or Spanish, you may request to have the examination translated by contacting PSI and paying an additional cost for each translation. You will be advised of the cost once PSI receives the quote for the translation. This fee will be paid by the candidate. To request, please fill out the form by Clicking Here.

Candidates may also bring a bound Word-to-Word translation dictionary. The dictionary cannot contain pictures or definitions. Candidates are not permitted to bring in any additional papers (loose or attached) with their dictionary. Highlighting, underlining, indexing or marking in the dictionary prior to or during the examination is prohibited. Any candidate caught writing, highlighting, underlining, and or indexing in the dictionary during the examination will be subject to forfeiting their dictionary, termination of their examination and reporting the incident to the Texas Department of Licensing and Regulation.

#### **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 (833) 333-4741. Every effort will be made to reschedule your examination at a convenient time as soon as possible.

#### REPORTING TO THE EXAMINATION SITE

On the day of the examination, you should arrive 30 minutes prior to your scheduled appointment time. This allows time for sign-in and identification verification. NO conversing or any other form of communication among candidates is permitted once you enter the examination area.

If you arrive late, you will NOT be admitted to the examination site and you will forfeit your examination registration fee.

#### REQUIRED IDENTIFICATION AT EXAMINATION SITE

You must provide 1 form of identification. The identification must be a VALID form of government-issued identification for example, driver's license\*, state ID, or passport, which bears your printed name, photograph, signature or fingerprint, date of birth, and expiration date. Identification provided must match all information provided by TDLR to PSI upon eligibility. If your ID does not contain the required information, you may be asked to provide other forms of valid identification to confirm your identity. A digital copy of your identification documentation will be taken upon check in, and stored with your personal data.

\*An expired driver's license will be accepted <u>only</u> if accompanied by a VALID Texas Department of Public Safety temporary permit. Likewise, the temporary permits must be accompanied by the expired DPS driver's license.

If you cannot provide the required identification, you must call (833) 333-4741 at least 3 weeks prior to your scheduled appointment to arrange a way to meet this security requirement. Failure to provide 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 and will forfeit your examination fee.

#### **SECURITY PROCEDURES**

The following security procedures will apply during the examination:

- 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.
- Candidates may take only approved items into the examination room.
- All personal belongings of candidates, with the exception of close-fitting jackets or sweatshirts, should be placed in the secure storage provided at each site prior to entering the examination room. Personal belongings include, but are not limited to, the following items:
  - **Electronic devices of any type**, including cellular / mobile phones, recording devices, electronic watches, cameras, pagers, laptop computers, tablet computers (e.g., iPads), music players (e.g., iPods), smart watches, radios, or electronic games.
  - **Bulky or loose clothing or coats** that could be used to conceal recording devices or notes, including coats, shawls, heavy jackets, or overcoats.
  - Hats or headgear not worn for religious reasons or as religious apparel, including hats, baseball caps, or visors.
  - Other personal items, including purses, notebooks, reference or reading material, briefcases, backpacks, wallets, pens, pencils, other writing devices, food, drinks, and good luck items.
- Person(s) accompanying an examination candidate may not wait in the examination center, inside the building or on the building's property. This applies to guests of any nature, including drivers, children, friends, family, colleagues or instructors.
- No smoking, eating, or drinking is allowed in the examination center.
- During the check in process, all candidates will be asked if they possess any prohibited items. Candidates may also be asked to
  empty their pockets and turn them out for the proctor to ensure they are empty. The proctor may also ask candidates to lift up
  the ends of their sleeves and the bottoms of their pant legs to ensure that notes or recording devices are not being hidden
  there.
- Proctors will also carefully inspect eyeglass frames, tie tacks, or any other apparel that could be used to harbor a recording device. Proctors will ask to inspect any such items in candidates' pockets.
- If prohibited items are found during check-in, candidates shall put them in the provided secure storage or return these items to their vehicle. PSI will not be responsible for the security of any personal belongings or prohibited items.
- Any candidate possessing prohibited items in the examination room shall immediately have his or her test results invalidated, and PSI shall notify the examination sponsor of the occurrence.
- Any candidate seen giving or receiving assistance on an examination, found with unauthorized materials, or who violates any
  security regulations will be asked to surrender all examination materials and to leave the examination center. All such
  instances will be reported to the examination sponsor.
- Copying or communicating examination content is violation of a candidate's contract with PSI, and federal and state law. Either
  may result in the disqualification of examination results and may lead to legal action.
- Once candidates have been seated and the examination begins, they may leave the examination room only to use the restroom, and only after obtaining permission from the proctor. Candidate will not receive extra time to complete the examination.

#### COMPUTER-BASED EXAMINATIONS

The examination will be administered via computer. You will be using a mouse and computer keyboard.

#### **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 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 following the tutorial so that you may practice answering questions, and reviewing your answers.

#### **TEST QUESTION SCREEN**

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.

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.

#### **EXAMINATION REVIEW**

PSI, in cooperation with TDLR, will be regularly evaluating the examinations being administered to ensure that the examinations accurately measure competency in the required knowledge areas. While taking the examination, examinees will have the opportunity to provide comments on any questions. Comments may be entered by clicking the Comments link on the function bar of the test question screen.

These comments will be analyzed by PSI examination development staff. Although PSI does not respond to individuals regarding these comments, all substantive comments are reviewed. If a discrepancy is found during the comment review, PSI and the department may re-evaluate candidate results and adjust them accordingly. This is the only review of the written examination available to candidates.

#### **EXAMINATION SITE LOCATIONS**

Abilene

301 S Pioneer, Suite 103/104

Abilene, TX 79605

Head NW on US-83 N/US-84 W. Take the US-84 W/I-20 BUS exit toward Sweetwater/S 1st street. Turn Right onto S 1st street (signs for 1-20 E). Turn Right onto S Pioneer Drive.

Amarillo

4312 Teckla, Suite 500

Amarillo, TX 79109

Exit off I-40 to Western and go South one street passed the 7th traffic light to Ridgecrest and turn right. Stay on Ridgecrest until you come to the red brick office complex on the left side corner of Ridgecrest and Teckla. 4312 is the 3rd building facing Teckla. Ste 500 is the end suite on the North sideof the building.

Arlington

CenterPoint IV

2401 E. Randol Mill Road, Suite 160Arlington, TX 76011

From TX-360 S - Take the TX-180 exit towards Division St. Merge onto N Watson Rd. Take a slight left towards S. Watson Rd. Use the middle lane to turn left onto E Randol Mill Rd. The Centerpoint IV building will be on your right.

From I-30 E - Take exit 28 toward Baird farm Road/Ballpark Way/Legends Way. Merge onto E Copeland Rd. Take a slight right onto TX-360 FrontageRd/N Watson Rd. Turn Right onto East Randol Mill Rd. The Centerpoint IV building will be on your right.

Austin

8000 Centre Park Drive, Suite 345

Austin, TX 78754

From US-290 East, merge onto US-290 East and exit onto I-35 North. Follow signs for US-183 North. Continue on US-183 North for 2.5 miles. Take the exit for FM 1325/Burnet Rd. Turn right onto Centre Park Dr.

Austin

1524 S I-35 Frontage Road, Suite 300

Austin, TX 78704

From I-35 S - Take exit 232 towards Woodland Ave. Merge onto S I-35 Frontage Rd and get into the right lane. In .1 miles, turn right into the parking lot. There is surface parking available for visitors. The PSI Testing Center is located on the 3rd floor.

Corpus Christi

2820 S Padre Island Dr., Suite 105

Corpus Christi, TX 78415

From So. Padre Island Drive East, exit at Kostoryz. Loop back under the Kostoryz light, travel west on the access road to the 2820 building. The examination site is located between Kostoryz and Ayers at the 2820 Building on the North site of the SPID access road.

Dallas

One Empire

1140 Empire Central Dr, Suite 610

Dallas, TX 75247

From I-35E South (Stemmons Fwy), exit Empire Central (#434A). Turn right on Empire Central Dr. From I-35E North towards Denton exit at Empire Central and turn left on Empire Central Dr.

Dallas/Richardson

1701 N Collins Blvd, Suite 130

Richardson, TX 75080

From US-75 North take exit 26 onto N. Central Expressway toward Collins Blvd./Campbell Rd. turn left onto Campbell Rd. Turn left on Collins Blvd. Building is on right.

El Paso

11500 Pellicano Dr, Suite B13

El Paso, TX 79936

Coming from El Paso Airport, take 1-10 E to exit 28B towards Yarbrough drive. Merge onto Gtwy blvd east and turn left onto Lomaland drive. Continue to Pellicano drive and make a right and continue for a mile, complex is on the right hand side. Business complex building B is facing Goodyear drive on the right-hand side.

Fort Worth

6801 McCart Avenue, Suite B-1

Fort Worth, TX 76133

From I-20 take the McCart Ave exit #435. Go South on McCart Ave passing Altamesa Blvd. You will turn left at the next light which would be Southpark Lane. To the right, you may enter the 1st immediate parking entrance or the 2nd parking entrance on your right at 6801 McCart Ave Professional Building. Our office suite is B1 which is located on the Northside of the building facing Southpark Lane.

Harlingen - Innovative Minds

**Executive Central Office Building** 

722 Morgan Blvd Suite D

Harlingen, TX 78550

From McAllen, TX: Get on I-2 from Hwy 83/W Business 83/W U.S. Business 83 and S 2nd St/S Col Rowe Blvd. Follow I-2 to US-83 BUS E in Harlingen. Take exit 175 from 1-2. Take Tyler Ave to Morgan Blvd.

From Brownsville: Get on I-69E N/US-77 N/US-83 N from E 7th St. Follow I-69E N/US-77 N/US-83 N to S Expressway 83/Frontage Rd in Harlingen. Take exit 23A from I-69E N/US-77 N/US-83 N. Take Camelot Dr and S 77 Sunshine Strip to Morgan Blvd.

Houston North (Greenbriar Place)

Greenbriar Place

650 North Sam Houston Pkwy E, Suite 535

Houston, TX 77060

From the Beltway 8 going West, exit Imperial Valley Drive. U-turn under the belt. Go East on the Service Road (N Sam Houston Pkwy E).

The site is just before the Hardy Toll Road Exit.

From I-610, take 45-North toward Dallas, exit Beltway 8 - East. Go East on the Service Road of Beltway 8 (N Sam Houston Pkwy E).

Houston (East)

Atrium Building

11811 I-10 East Freeway, Suite 260

Houston, TX 77029

From I-10 East, take the Federal Rd exit #778A. U-turn under the freeway and come back on the feeder road going West. Building is on the right side, next to Pappasitos Cantina.

From I-10 West, take the Holland Rd exit. Stay on the feeder road, building is on the right side, next to Pappasitos Cantina.

Houston (Southwest)

One West Belt

9555 W. Sam Houston Pkwy South, Suite 250

Houston, TX 77099

The street address is on the marquee in front of the building (9555 West Sam Houston Parkway South). On a smaller sign, sitting down in the grass next to the entry on Bissonnet, is the notation, "One West Belt". The Sam Houston Pkwy is also known as Beltway 8. From US 59, heading South: Take the Bissonnet exit and turn right onto Bissonnet. Go about one mile - the building is on the right just before you reach the West Sam Houston Pkwy. You can turn right from Bissonnet into the parking lot, or, if you come to the Beltway, turn right onto the feeder road and then an immediate right into the parking lot.

Houston (Northwest)

9800 Northwest Freeway, Suite 200

Houston, TX 77092

From Hwy 290 driving southeast, merge onto Loop 610 North. Exit at T.C. Jester and then U-turn under Loop 610. Stay on the feeder road, Sheraton Hotel is on the right as the road curves right. Turn into the parking lot immediately after the Sheraton Hotel and before the office building. Site is on the 2nd floor.

Lubbock

The Center

4413 82nd St., Suite 210

Lubbock, TX 79424

From S Loop 289, take the Quaker Ave exit and go South. Turn right on 82nd St.

McAllen

7000 N. 10th Street Suite C-4

McAllen, TX 78504

From S Expressway 281/S US-281, turn right onto E Trenton Rd. Turn left onto N 10th St/TX-336. The test site is on the left.

Midland

Westwood Village Shopping Center

4200 West Illinois Avenue, Suite 200

Midland, TX 79703

From I-20, take Midkiff Road exit. Go North on Midkiff Road. Take a left on Illinois Ave. Go .8 miles and turn right into Premier High School in the shopping strip parking lot at 4200 W Illinois. Suite is at the end of the left Strip.

San Antonio

6655 First Park 10 Blvd., Suite 230

San Antonio, TX 7821

From I-10 West - Take exit 565A towards Crossroads Blvd/Balcones Heights and merge onto Frontage Rd. Turn right onto First Park Ten Blvd and go about ½ mile. The building will be on the right.

San Antonio 5555 NW Parkway, Ste 135. San Antonio, TX 78249

From I-10E - Use the right lane to take exit 559 towards TX-345 S/Fredericksburg Rd. Use the right land to merge onto Frontage Road/I-10 Frontage Rd. Go .4 miles then turn right onto Northwest Parkway. Take the second right into the parking lot and enter the building.

Tyler 3800 Paluxy Dr, Suite 310 Tyler, TX 75703

From 1-20, turn south on Hwy 69 and go to Loop 323. Turn right on 323 and follow 323 to the intersection of Paluxy Dr. Turn right on Paluxy Drive. The Paluxy Square Complex will be immediately on the left. Go to Building 3 which is in the back.

Waco 345 Owen Lane, Suite 124 Waco, TX 76710

From TX-6, take the Waco Drive exit, loop under the bridge where you will be on Sanger Ave, turn right on Owen Ln. The examination site is behind the Richland Mall and directly across the street from the City of Waco water tower.

#### **SCORE REPORTING**

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

- <u>On screen</u> 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 pass, you will immediately receive a successful notification.
  - If you <u>do not pass</u>, you will receive a diagnostic report indicating your strengths and weaknesses by examination type with the score report.
- On paper an official score report will be printed at the examination site.

#### **DUPLICATE SCORE REPORTS**

You can print a duplicate score report from your online account.

#### **NON-SCORED ITEMS**

Your examination contains non-scored questions. The use of such questions is an essential step in developing accurate future examinations. These questions will NOT be scored and time to answer them has been added to the time allowed.

#### **EXAMINATION REFERENCE MATERIAL LIST**

The reference materials listed below were used to prepare the questions for the examinations. When responding to the test questions, do not consider code exceptions unless the test question specifically directs you to consider them.

**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.

The examinations are OPEN BOOK. The following reference materials are allowed in the examination site and may be purchased directly from the publisher, from a bookstore or downloaded from the Internet and spiral-bound or 3-hole-punched and placed in a binder.

Exams are based on the most recent edition unless otherwise specified below.

#### TX BUSINESS AND LAW REFERENCE LIST

- Texas Air Conditioning and Refrigeration Contractors License Law, Texas Occupations Code, Chapter 1302
- Texas Air Conditioning and Refrigeration Contractors License Rules, Texas Administrative Code, Chapter 75
- OSHA CFR 29 Part 1904 Recording and Reporting Occupational Injuries and Illnesses, OSHA Washington, DC

#### **CODE REFERENCES**

- Uniform Mechanical Code, 2021 Edition, International Association of Plumbing and Mechanical Officials.
- International Mechanical Code, 2021 Edition, International Code Council, Inc.
- International Fuel Gas Code, 2021 Edition, International Code Council, Inc

#### **TECHNICAL REFERENCE LIST**

- Modern Refrigeration and Air Conditioning, Althouse, Turnquist and others, Goodheart-Willcox Publishers, 22<sup>nd</sup> Edition, 2025, www.psionlinestore.com
- ADI Duct Size Calculator, Air Distribution Institute, www.steelduct.org

The following three references are used for Environmental Class A and Class B examinations only:

- Manual D Residential Duct Systems, 2014 Edition, Air Conditioning Contractors of America (ACCA), www.acca.org
- Manual J Residential Load Calculation, Eighth Edition, Version 2.50, 2016, Air Conditioning Contractors of America (ACCA), www.acca.org
- Manual S Residential Equipment Selection, 2014 Edition, Air Conditioning Contractors of America (ACCA), www.acca.org

Candidates are responsible for bringing their own reference materials to the examination site. Electronic notepads will be provided.

#### What is allowed:

- References from the *Examination Reference Material* list, purchased directly from the publisher, a bookstore, or downloaded from the Internet and spiral-bound or 3-hole-punched and placed in a binder.
- Texas Business and Law references downloaded from the Internet and spiral-bound or 3-hole-punched and placed in a binder may be used for the examination.
- Candidate's reference materials may be highlighted, underlined, and/or contain notes prior to the examination session.
- Reference materials may be tabbed with <u>permanent</u> index tabs. (Paper inserts contained inside permanent plastic index tabs will be allowed).

#### What is not allowed:

- Candidates may **NOT** write, highlight, underline, index, or mark their reference materials <u>during</u> the examination session.
- Candidates are NOT permitted to have their reference materials tabbed with temporary tabs, post-it note tabs, homemade tabs or DIY tabs.
- Any additional paper (loose, taped, adhered, stapled, etc.) will NOT be allowed in the examination room.

#### Consequences:

- Candidates arriving with non-compliant reference materials will be given the option to test without their non-compliant reference, test with their temporary tabs removed by the candidate, or forfeit their exam fee and test on another day with reference materials in compliance with CIB requirements at the candidate's expense.
- Violations occurring during the exam session will be reported to the Texas Department of Licensing and Regulation and can result
  in candidates surrendering all exam materials including their code books, invalidation of their test score, and severe civil and/or
  criminal penalties.

#### **EXAMINATION CONTENT OUTLINES**

Environmental Air - Class A 120 Items - 230 Minutes - 70% 5 Non-Scored Items - 10 Minutes Examination Fee \$74

# Ventilation 6 Air Equipment Machinery Room Venting 5 Dryers Vent Assembly

#### **CONTENT OUTLINE**

Subject Area	# of Questions
Air Distribution	18
Airflow	
Duct Installation	
Duct Sizing	
Filtration	
Return and Supply Grilles	
Static Pressure	
Basic Refrigeration Components	6
Compressors	
Condensers	
Evaporators	
Metering Devices	
Refrigerants	
Combustion Air	6
Controls	6
General	
Pressure and Safety	
Temperature	
Equipment Requirements and	
Design	14
Sensible and Latent Capacities	
Heat Loads	
HVACR Codes	
Voltage	
HVAC Systems	11
Components	
Installation	
Refrigeration Systems	
Piping	6
Condensate	

Pipe Fittings	
Pipe Sizing	
Pipe Type	
Support	
Valves	
Refrigeration Principles	6
Heat Transfer	
Physics	
System Pressure	
Safety	6
Service	12
Electrical	
Diagnostics	
Refrigerant Recovery	
Superheat	
Subcooling	
Testing	12
Airflow	
Combustion	
Electrical	
Gas	
Texas Laws and Rules	6

Environmental Air - Class B

100 Scored Items - 170 Minutes - 70%

5 Non-Scored Items - 10 Minutes

Examination Fee \$60

#### **CONTENT OUTLINE**

Subject Area	# of Questions
Air Distribution	15
Airflow	
Duct Installation	
Duct Sizing	
Filtration	
Return and Supply Grilles	
Static Pressure	
Basic Refrigeration Components	5
Compressors	
Condensers	
Evaporators	
Metering Devices	
Refrigerants	
Combustion Air	5
Controls	5
General	
Pressure and Safety	
Temperature	
Equipment Requirements and	
Design	12
Sensible and Latent Capacities	
Heat Loads	
HVACR Codes	
Voltage	
HVACR Systems	9
Components	
Installation	
Refrigeration Systems	
Piping	5
Condensate	
Pipe Fittings	
Pipe Sizing	
Pipe Type	
Support	
Valves	
Refrigeration Principles	5
Heat Transfer	
Physics	
System Pressure	
Safety	5
Service	10
Electrical	
Diagnostics	
Refrigerant Recovery	

Superheat	
Subcooling	
Testing	10
Airflow	
Combustion	
Electrical	
Gas	
Texas Laws and Rules	5
Ventilation	5
Air Equipment	
Machinery Room	
Venting	4
Dryers	
Diyeis	

Commercial Refrigeration - Class A
120 Scored Items - 230 Minutes - 70%
5 Non-Scored Items - 10 Minutes
Examination Fee \$74

#### **CONTENT OUTLINE**

Subject Area	# of Questions
Air Distribution	6
Airflow	
Duct Installation	
Duct Sizing	
Filtration	
Static Pressure	
Basic Refrigeration Components	10
Compressors	
Condensers	
Evaporators	
Metering Devices	
Refrigerants	
Combustion Air	3
Controls	14
General	
Pressure and Safety	
Temperature	
Equipment Requirements	12
Sensible and Latent Capacities	
Heat Loads	
HVACR Codes	
Voltage	
HVACR Systems and Design	20
Components	
Installation	
Refrigeration Systems	
Piping	11
Condensate	
Pipe Fittings	
Pipe Sizing	
Pipe Type	
Support	
Valves	
Refrigeration Principles	10
Heat Transfer	
Physics	
System Pressure	
Safety	7
Service	11
Electrical	
Diagnostics	

Refrigerant Recovery	
Superheat	
Subcooling	
Testing	6
Airflow	
Combustion	
Electrical	
Gas	
Texas Laws and Rules	6
Ventilation	2
Air Equipment	
Machinery Room	
Venting	2
Dryers	
Vent Assembly	

Commercial Refrigeration - Class B 100 Scored Items - 170 Minutes - 70% 5 Non-Scored Items - 10 Minutes Examination Fee \$60

#### **CONTENT OUTLINE**

Subject Area	# of Questions
Air Distribution	5
Airflow	
Duct Installation	
Duct Sizing	
Filtration	
Static Pressure	
Basic Refrigeration Components	8
Compressors	
Condensers	
Evaporators	
Metering Devices	
Refrigerants	
Combustion Air	3
Controls	11
General	
Pressure and Safety	
Temperature	
Equipment Requirements	10
Sensible and Latent Capacities	
Heat Loads	
HVACR Codes	
Voltage	
HVACR Systems and Design	17
Components	
Installation	
Refrigeration Systems	
Piping	9
Condensate	
Pipe Fittings	
Pipe Sizing	
Pipe Type	
Support	
Valves	
Refrigeration Principles	8
Heat Transfer	
Physics	
System Pressure	
Safety	6
Service	9
Electrical	

Diagnostics	
Refrigerant Recovery	
Superheat and Subcooling	
Subcooling	
Testing	5
Airflow	
Combustion	
Electrical	
Gas	
Texas Laws and Rules	5
Ventilation	2
Air Equipment	
Machinery Room	
Venting	2
Dryers	
Vent Assembly	

## Certified Technician 60 Scored Items - 112 Minutes - 70% 4 Non-Scored Items - 8 Minutes Examination Fee \$60

#### **CONTENT OUTLINE**

Subject Area	# of Questions
Basic Refrigeration Components	9
Compressors	
Condensers	
Evaporators	
Metering Devices	
Refrigerants	
Combustion Air	3
Controls	6
General	
Pressure and Safety	
Temperature	
Piping	3
Condensate	
Pipe Fittings and Types	
Pipe Sizing	
Refrigeration Principles	9
Heat Transfer	
System Pressure/Temperature	
Safety	3
Testing, Diagnostics, and Service	27
Airflow	
Electrical	
Gas Heating	
Refrigerant	

Modern Refrigeration and Air Conditioning - 2025 (22<sup>nd</sup> Edition)

\*\*\* Pressure/Temperature Chart located on Page 1309 \*\*\*