

## Contest Description

Edmonton Expo Centre, Edmonton

May 6 & 7, 2026

<b>EVENT:</b> Refrigeration and Air Conditioning	<b>LEVEL:</b> Post-Secondary																								
<b>WORLDSKILLS TRADE #:</b> 38	<b>LOCATION:</b> Hall A, Edmonton EXPO Centre, Edmonton																								
<b>DURATION:</b> 13 Hrs. (Two Days)																									
<b>COMPETITION SCHEDULE:</b> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <b>May 6:</b> <table border="1"> <tr><td>ORIENTATION</td><td>7:30AM-8:00AM</td></tr> <tr><td>COMPETITION</td><td>8:00AM-10:00AM</td></tr> <tr><td>BREAK</td><td>10:00AM-10:15AM</td></tr> <tr><td>COMPETITION</td><td>10:15AM-12:15PM</td></tr> <tr><td>LUNCH</td><td>12:15PM-1:00PM</td></tr> <tr><td>COMPETITION</td><td>1:00PM-4:00PM</td></tr> </table> </div> <div style="width: 48%;"> <b>May 7:</b> <table border="1"> <tr><td>ORIENTATION</td><td>7:00AM-7:30AM</td></tr> <tr><td>COMPETITION</td><td>7:30AM-9:30AM</td></tr> <tr><td>BREAK</td><td>9:30AM-9:45AM</td></tr> <tr><td>COMPETITION</td><td>9:45AM-11:45AM</td></tr> <tr><td>LUNCH</td><td>11:45AM-12:30PM</td></tr> <tr><td>COMPETITION</td><td>12:30PM-2:30PM</td></tr> </table> </div> </div>		ORIENTATION	7:30AM-8:00AM	COMPETITION	8:00AM-10:00AM	BREAK	10:00AM-10:15AM	COMPETITION	10:15AM-12:15PM	LUNCH	12:15PM-1:00PM	COMPETITION	1:00PM-4:00PM	ORIENTATION	7:00AM-7:30AM	COMPETITION	7:30AM-9:30AM	BREAK	9:30AM-9:45AM	COMPETITION	9:45AM-11:45AM	LUNCH	11:45AM-12:30PM	COMPETITION	12:30PM-2:30PM
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**Please Note:** This document is subject to change as competition information is updated. Competitors are responsible for staying up to date with the most recent information. Check the footer for last updated date. Changes will be highlighted in **yellow**.

### CONTEST INTRODUCTION:

To assess the competitor's ability to demonstrate theoretical and practical skills in performing Refrigeration and Air Conditioning system installation, start-up, maintenance/service, troubleshooting, and customer relations.

### SKILLS AND KNOWLEDGE TO BE TESTED:

- Exemplify safety, use of PPE & Code of Practice
- Maintain neatness and cleanliness
- Effective planning and use of time
- Accurate application of wiring diagrams
- Troubleshooting and installation of wiring and controls
- Pipe measurement, cutting, connecting within tolerances
- Demonstrate efficient use of materials
- Demonstrate proper/safe use of trade specific tools & equipment
- Perform system pressure testing, evacuation, and charging
- Perform system commissioning
- Exhibit interpersonal ability

## PROJECT DESCRIPTION

- Troubleshoot an HVAC/R system
- Refrigeration system installation project

## EQUIPMENT & MATERIALS

### Equipment and Materials Competitors Must Supply:

Common Screwdrivers (Phillips, Robertson, Slot, Terminal)	Electrical Side Cutters	Swaging Tool Kit (manual or powered)
Common Nut Drivers ¼" – ½"	Hammer	Inspection Mirror, Flashlight & Spare Batteries
Set Of Combination Wrenches	File Set	Pens, Pencils, Erasers, Rulers, Notepads & Calculator
6", 10", 12" Adjustable Wrenches	Set Of Imperial Allen Keys	Tape Measure
Linesman, Needle Nose, Slip Joint and Water Pump Pliers	Valve Wrenches	Tubing Cutter ¼" – ¾"
Paper Pressure Temperature Chart	Refrigeration Gauge Manifold and hoses. (digital or analog) (NO TEMP PROBES)	Utility Knife
Separate Or Combination Wire Strippers and Crimpers	Flaring Block and Yoke (Manual or powered)	CSA Approved Safety Glasses
CSA Approved Safety Steel Toed Footwear	CSA Approved Hearing Protection	Task Specific Gloves for Brazing, Refrigerant Charging, Mechanical Work, Delicate Dexterity, And Cutting <ul style="list-style-type: none"> <li>• Leather Gloves for Brazing</li> <li>• Mechanic Style For All Other Tasks</li> </ul>

### Equipment and Materials Supplied by the Committee:

Charging Scale and Equipment	Refrigerant	Leak Detector
Vacuum Pump (Fieldpiece VP67) and Equipment	Torches And Brazing Materials	Nitrogen Cylinder and Regulator
Micron Gauge	Tube Benders (Competitor Can Supply)	Purging Flow Meters
Electrical Meters	Parts And Fittings	Probe Style, And Pipe Clamp Thermometers
Cord Caps and Padlocks		

## Competition Specific Rules

The following Competition Specific rules along with SCA's overall Policies and Procedures provide specific details in competition areas that may vary from one another. Any additional contest rules will be reviewed during the Competitor Orientation.

Topic/Task	Contest Specific Rule
Communication inside competition area.	During competition times, competitors may only communicate with judges. Communicating with outside individuals or other competitors could result in being removed from the competition.
Use of Technology	Competitors are <b>not allowed</b> laptops, tablets, cameras, cell phones, ear buds, other personal electronics in the competition area unless specified by the committee for certain tasks.
Use of Artificial Intelligence (AI)	Competitors <b>cannot</b> use AI for any aspects of the competition.

## JUDGING CRITERIA

- Controls/wiring
- Piping
- Refrigerant Handling
- Safety
- Functionality/Commissioning
- Trade Knowledge
- Effective Communication

\*Points will be awarded or deducted as evaluated by the judges. Competitors will be ranked by total accumulated points.

**TIE BREAKING PROCESS**

In the event of a tie for any ranking, total refrigeration project time will be the tie breaker. If competitors are tied on time, then the main project score will rank the competitors. If the competitors are still tied after the main project score, then the troubleshooting score will then rank the competitors. The final tie breaking process if competitors are tied on time, main project score, and troubleshooting score then the competition safety score will be the last tie breaker.

**SAFETY**

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

**CLOTHING REQUIREMENT**

Appropriate clothing (preferably natural fibers or fire retardant), free of rips or tears must be worn to compete. All clothing including boots and PPE must be in good repair, neat, clean and free of rips tears or anything that may compromise the integrity of the protection it offers (i.e. worn toes on work boots, holes in gloves). Casual wear such as shorts will not be permitted. No loose clothing or jewelry allowed for your safety. Long sleeve shirts must be worn while brazing.

**ADDITIONAL INFORMATION****Skills Canada Alberta Regional and Provincial Rules and Regulations**

[Regional and Provincial Rules and Regulations](#)

**Skillz & Thrillz Podcast**

Check out our podcast – Skillz & Thrillz: Alberta's Trade & Tech Youth Podcast. Our talented alumni share tips and tricks on how to succeed in competitions and your career! Their insights can help you prepare for your Skills journey, and who knows, you might just be a future guest!

<https://skillsalberta.com/student-resources/skillz-thrillz-albertas-trade-tech-youth-podcast/>

**Test Project Change at the Competition**

Where a Test Project has been circulated to competitors in advance, the PTC can change the project up to a maximum of 30% of the work content for the competition.

**Lunch**

Lunch for competitors will be provided by Skills Canada Alberta.



### **Parking & Venue Maps**

Parking is FREE for all attendees.

Attendees **MUST** register for FREE parking by clicking the below link. Attendees can pre-register their vehicle at anytime prior to the PSCC or register onsite at the PSCC.

<https://www.offstreet.io/events/CBLHM7U1>

<http://edmontonexpocentre.com/attend/parking/>

### **Opening Ceremonies / Competitor Onsite Registration**

Opening Ceremonies for the PSCC will take place on Tuesday May 5, 2026, at 6:00 pm in Hall D of the Edmonton EXPO Centre. Admission is free, and everyone is welcome to attend. It is important to note that competitor registration will open immediately following the Opening Ceremonies.

### **Awards Ceremony**

The Awards Ceremony will take place on Thursday May 7, 2026, at 6:30 pm in Hall D of the Edmonton EXPO Centre. Admission is free and everyone is welcome to attend. The Awards Ceremony will be shown live at <http://skillsalberta.com/>

### **Team Alberta Information**

Team Alberta will be selected at the PSCC Awards Ceremony. Gold medalists will then be eligible to participate at the Skills Canada National Competition (SCNC) on May 27- May 30, 2026, in Toronto, Ont. It is recommended that competitors review and become familiar with the SCNC contest description and project at <https://www.skillscompetencescanada.com/en/event/skills-canada-national-competition-2026/>

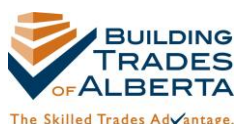
During the PSCC Awards Ceremony on Thursday May 7, 2026, Gold medalists will be given their Team Alberta information package and will confirm their participation in the SCNC. Students must be present at the Awards Ceremony to claim their position on Team Alberta. If the Gold medalist is not able to attend SCNC, the next highest-ranking individual will be asked to participate. If a student is not able to attend the Awards Ceremony an email confirming the student's interest in Team Alberta participation must be emailed to [javierad@skillsalberta.com](mailto:javierad@skillsalberta.com) prior to the start of competition on May 6, 2026.

**Please prepare your students in advance to accept a position on Team Alberta and review how your school will support their participation.**

**Please see this link for additional Team Alberta information:** <https://skillsalberta.com/team-alberta/>

### **Questions?**

Please contact Mike Sury [MikeS@SkillsAlberta.com](mailto:MikeS@SkillsAlberta.com)





## COMMITTEE MEMBERS

Ty Smith – Startec services	Daniel Jonathan - SAIT
Keaton Ross - SAIT	Phil Dufour - NAIT
Brendan Finnigan – RSL	