

2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



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Contest Description

Edmonton Expo Centre, Edmonton

May 4 & May 5, 2022

EVENT: Sprinkler Systems Installer	LEVEL: Post -Secondary																		
DURATION: 12 hours (two days)	LOCATION: HALL A, Edmonton Expo Centre, Edmonton																		
COMPETITION SCHEDULE:																			
May 4:	May 5:																		
<table border="1"><tr><td><i>ORIENTATION/ COMPETITION</i></td><td>7:30AM</td></tr><tr><td>BREAK</td><td>9:30AM – 9:45AM</td></tr><tr><td>LUNCH</td><td>12:00PM – 1:00PM</td></tr><tr><td>BREAK</td><td>2:30PM – 2:45PM</td></tr><tr><td>COMPETITION</td><td>2:45PM - 4:00PM</td></tr></table>	<i>ORIENTATION/ COMPETITION</i>	7:30AM	BREAK	9:30AM – 9:45AM	LUNCH	12:00PM – 1:00PM	BREAK	2:30PM – 2:45PM	COMPETITION	2:45PM - 4:00PM	<table border="1"><tr><td><i>ORIENTATION/ COMPETITION</i></td><td>8:00AM</td></tr><tr><td>BREAK</td><td>9:30AM – 9:45AM</td></tr><tr><td>LUNCH</td><td>12:00PM - 1:00PM</td></tr><tr><td>COMPETITION</td><td>2:30PM - 2:45PM</td></tr></table>	<i>ORIENTATION/ COMPETITION</i>	8:00AM	BREAK	9:30AM – 9:45AM	LUNCH	12:00PM - 1:00PM	COMPETITION	2:30PM - 2:45PM
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CONTEST INTRODUCTION

Purpose of the Challenge:

To assess the contestant's knowledge and skills in the fabrication and installation of a fire sprinkler system and components with high regard to the aspects of quality of workmanship proficiency of piping/system component installation and accuracy of work within a specified time frame.

Skills and Knowledge to be tested:

- Applying mathematical concepts involving planning, measuring, layout, and installation of a piping system.
- Interpretation and application of blueprint specifications.
- Assembling and fabricating a piping system
 - o measure, cut, and fabricate steel pipe and fittings
 - o use tools & equipment to join pipe, fittings, and system components
 - o applying safe work practices and strong positive work ethic

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CONTEST DESCRIPTION

This year's competition will be a two part competition which will demonstrate the necessary skills required in the Sprinkler trade.

Day 1

The Sprinkler Systems Installer apprentice will be required to create a residential sprinkler valve tree which will feed a CPVC piping arrangement that feeds three of the main sprinkler heads (sidewall, concealed pendent and a two piece semi recessed pendent). Along with that the apprentice will be required to install 3 electrical devices that would connect to a sprinkler system, the wiring of these devices is not required because of the trade cross over. The residential mock-up is what would be commonly found in a house that is fully fire sprinklered. This project will measure the apprentice's ability to read and interpret a blue print, measure, cut, thread, groove and solvent weld, steel and CPVC pipe according to the drawing provided. The apprentice will also demonstrate their ability to cut through wood to install sprinkler piping and fire protection devices.

Day 2

The Sprinkler Systems Installer apprentices will be required to create and 45 degree parallel equal spread offset project. This project will utilize the four main piping system a Sprinkler Systems Installer would see in the field, threaded steel, grooved steel, CPVC and soldered copper. The apprentice will required to use a Ridgid 300 to thread and groove the steel pipe, they will be required to solder the copper pipe and finally they will be required to solvent weld the CPVC pipe.

Tasks that may be performed during the contest

- Applying mathematical concepts involving offsets.
- Interpreting and applying the blueprint specifications
- Assembly of various pipe and fitting systems
 - Carbon steel threaded / bolted
 - Pipe Fabrication
 - CPVC solvent
 - Copper soldering
- Apply safe work practices
- All dimensions will be taken from the designated centerline or benchmarks unless directed otherwise
- Tool inspection prior to event or the evening before competition
- There will not be any onsite pipe joinery technique instruction
- Proper insertion for all pipe joint is mandatory
- It is to be understood that throughout the competition, safety and project judging will be ongoing

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- No project specific aids, tools allowed
- Dimensions may be modified before competition

EQUIPMENT, MATERIAL, CLOTHING

Equipment and Material Provided by The Committee:

Teflon Tape	Pipe threading machine	Roll groovers
Paint markers	Pipe cutters	½" – ¾" die head
Pencil/paper/calculator	Master Pro-Dope, Brush	

Note: No other tools than the tools listed above will be allowed into competition area.

Equipment and Materials Provided By the Competitor

No equipment and material will be provided by the competitor. Required clothing (Provided by competitor)

- Coveralls / overalls allowed if sleeves used
- No jewellery
- Long hair must be tied back and concealed
- No cell phones or electronic devices allowed

SAFETY REQUIREMENTS

List of required personal protective equipment (PPE) provided by competitor

- Safety glasses
- CSA approved safety shoes
- Nitrile-coated gloves
- Hearing protection
- Hard hat
- Gloves

ASSESSMENT

Point breakdown

POINT BREAKDOWN	/100
Installation/Fabrication Efficiency	15
Accuracy of Equipment Installation	15
Accuracy of Measurements	15
Appearance/Quality	15
Use of Tools	10
Testing and Inspection	15
Safety	15

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Tie (No ties are allowed)

In the event of a tie, the competitor with the highest score in the safety criteria will be declared the winner.

ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations

[Regional and Provincial Rules and Regulations](#)

Competitors must be prepared to adhere to all public health measures in place at the time of the PSCC.

Lunch

Lunch for competitors will be provided by Skills Canada Alberta.

Parking & Venue Maps

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

Competitor Registration

Competitor Registration for the PSCC will take place on Tuesday May 3, 2022 from 9:00am-6:00pm outside Hall B of the Edmonton EXPO Centre. Please note you will be required to present your COVID-19 proof of vaccination.

Virtual Awards Ceremony

The Virtual Awards Ceremony will take place **Friday, May 6th at 6:30pm**. A link will be made available on the website with additional information prior to the ceremonies.

Team Alberta Information

Team Alberta (Post-Secondary) will be selected at the PSCC happening on May 4 - May 5, 2022. Top eligible medalists will compete at the Skills Canada National Competition (SCNC) May 24-28, 2022 in Vancouver, BC. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <http://www.skillscanada.com/>.

If a competitor is not able to attend the SCNC, competitors MUST notify Katherine Kupchenko katherinek@skillsalberta.com prior to the start of competition. If a gold medalist is not able to attend the SCNC, the next top-ranking individual will be asked to participate.

Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, PTC can change a maximum of 30% of the work content.

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Questions?

Please contact Whitney Koop whitneyk@skillsalberta.com if you have any questions regarding the Contest Description.

COMMITTEE MEMBERS

Emil Ohler	Mike Kastern (Chair)	Steve Bower
Chris McCloskey	Rob Russell	Graham Dewar

Last Updated Feb 9, 2022

