Skills Compétences Canada











CONTEST DESCRIPTION

Sprinkler Fitter

POST-SECONDARY

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1 THE SKILLS FOR SUCCESS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

The Government of Canada has updated the previous Essential Skills framework to the new Skills for Success model in response to the evolving labour market and changing skill requirements. This model outlines nine fundamental skills Canadians need to thrive in work, education, training, and daily life.

Skills/Compétences Canada aims to highlight the importance of these skills, vital for success in trade and technology careers. Competitors can see how Skills for Success are integrated into contest descriptions, projects, and project documents. Recognizing these skills during the competition helps competitors match tasks with specific skills necessary for success and understand how these skills apply within their trade or technology programs and future careers.

The nine key Skills for Success, validated for workplace success, are:

1. Numeracy
2. Communication
3. Collaboration
4. Adaptability
5. Reading
6. Writing
7. Problem Solving
8. Creativity and Innovation
9. Digital

These Skills for Success are detailed in sections 2.4 and/or 3.2 (to be completed by SCC) of your Contest Description and, if relevant, in your Project and supporting documents.

1 CONTEST INTRODUCTION

1.1 Description of the associated work role(s) or occupation(s)

https://www.skillscompetencescanada.com/en/skill_area/sprinkler-fitter/

1.2 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.

1.3 Duration of contest

12 hours

1.4 Skills and Knowledge to be tested.

- Applying mathematical concepts involving planning, measuring, layout and installation of a piping system[1,7]
- Interpretation and application of blueprint specifications[5,7]
- Recognition of types of systems, setup and troubleshoot with use of manufacturer's data[7]
- Assembling and fabricating a piping system[7]
    - Measure, cut, and fabricate steel and CPVC pipe and fittings[1]
    - Use tools & equipment to join pipe, fittings and system components[7]
    - Applying safe work practices and strong positive work ethic

Skills for Success – [1]Numeracy, [5]Reading, [7]Problem Solving

2 CONTEST DESCRIPTION

1.5 List of documents produced and timeline for when competitors have access to the documents on the Skills/Compétences Canada website.

DOCUMENT	DATE OF DISTRIBUTION
Project	December 2026

1.6 Tasks that may be performed during the contest.

- Interpreting and applying the blueprint specifications[5,7]
- Assembly of various pipe and fitting systems [7]
- Carbon steel grooved and threaded pipe. Apply safe work practices. All dimensions will be taken from the designated centerline or benchmarks unless directed otherwise.
- Blazemaster CPVC Piping. Apply safe work practices. All dimensions will be taken from the designated centerline or benchmarks unless directed otherwise.
- 45° offset calculations[1]
- Assembly and install of a system valve[7]
- There will not be any onsite pipe joinery technique instruction
- Proper insertion for all pipe joint is mandatory

Skills for Success – [1]Numeracy, [5]Reading, [7]Problem Solving

3 EQUIPMENT, MATERIAL, CLOTHING

1.7 Equipment and material provided by Skills/Compétences Canada

- Benches and/or tables
- Chain Vices
- Pipe Stands
- 9" level

- Paint markers
- Pencil/paper/calculator
- Power cords (GFI)
- Pipe cutters
- Roll groovers
- Air groovers
- Ridgid 300 Power Machine
- Tape measure
- Bastard half round file
- 10” channel lock pliers
- 10” crescent wrench
- 6’ Platform Ladder
- CPVC Reamer
- CPVC Solvent Cement

COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SKILL AREA.

1.8 Equipment and material provided by the competitor.

- No equipment and material will be provided by the competitor however; an empty tool pouch may be used if the competitor desires.

1.9 Required clothing provided by the competitor.

- Full Length Pants (Denim or Equivalent)
- No jewellery
- Long hair must be tied back and concealed
- No cell phones or electronic devices allowed

4 HEALTH AND SAFETY

1.10 Safety program

SCC has implemented a comprehensive safety program as health and safety is an integral part of our competitions. Our safety program includes guidelines and procedures to make the work environment in each skill area safer.

1.10.1 Safety manual

As part of our program a safety manual has been created to monitor and document health and safety within each skill area. It includes a definite plan of action designed to prevent accidents. The safety manual will be provided for every skill and these instructions must be followed and respected by all participants and officials at the SCNC.

1.10.2 Safety workshop

During orientation, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety, and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

1.11 List of required personal protective equipment (PPE) provided by Skills/Compétences Canada

- Gloves
- Safety Glasses
- Hearing Protection (as required)

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

- CSA approved safety shoes/boots
- Competitor can choose to bring their own gloves (cut resistant, i.e., Mechanix) as long as they are cut resistant and in good condition (May be subject to review by the National Technical Committee (NTC)

Note: Competitors who do not have the required protective equipment will not be allowed to participate in the competition

5 ASSESSMENT

1.13 Point breakdown

Note: This list is subject to change.

TASKS	/100
Steel Piping Fabrication	15.00
Steel Piping Installation	15.00
CPVC Piping Fabrication	10.00
CPVC Piping Installation	10.00
Manifold Installation	10.00
Use of Tools	10.00
Sprinkler Installation	10.00
Hose Station Installation	8.00
Safety	12.00
Point deduction: • Points deduction for measurements outside of tolerance • Points deduction for wasted material • Points deduction for safety infractions	

6 CONTEST SPECIFIC RULES

Contest specific rules cannot contradict or take priority over the Competition Rules. They do provide specific details and clarity in areas that may vary from contest to contest. Any additional contest rules will be reviewed during the competitor orientation.

TOPIC/TASK	CONTEST SPECIFIC RULE
Tools / Infrastructure	The National Technical Committee (NTC) will be conducting a toolbox inspection during competitor orientation. No project specific aid tools allowed.
Cellphones	Cell phones will be left at a space designated by the NTC during competition time. Competitors are free to retrieve them during Break and Lunch
Drilling of Pipe	All drilling of pipe is to be performed at ground level on the chain vices provided.

7 ADDITIONAL INFORMATION

1.14 Interpreter

If a competitor requires the help of an interpreter once onsite during the competition, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service may not be guaranteed.

1.15 Ties

- Tiebreaker #1: The competitor with the highest score in the Safety criteria will be declared the winner.
- Tiebreaker #2: The competitor with the highest score in the Steel Piping Fabrication criteria will be declared the winner.
- Tiebreaker #3: The competitor with the highest score in Steel Piping Installation will be declared the winner.

1.16 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, NTC shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

1.17 Competition rules

Refer to the competition rules of the Skills Canada National Competition which can be found on our website.

8 NATIONAL TECHNICAL COMMITTEE MEMBERS

MEMBER ORGANIZATION	NAME
New Brunswick	Ben Tucker
Ontario	Nicholas Smirnov – Chair
Manitoba	Mark Rasmussen – Co-Chair
Alberta	John Vetra
British Columbia	Rob Dhensaw
Nova Scotia	Mike Parks
Quebec	Dominique Fortin
Newfoundland and Labrador	Gerry Noftall
Saskatchewan	Shaun Bouvier

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