



2020 23rd ANNUAL SKILLS MANITOBA COMPETITION CONTEST DESCRIPTION

CONTEST NAME: Refrigeration and Air Conditioning

CONTEST NO: 38

LEVEL: Post-Secondary

NOTE: Maximum 6 Competitors

CONTEST LOCATION: Red River College - Notre Dame Campus – T1-31

CONTEST START TIME AND DURATION:

7:15 – Orientation

7:30am – 2pm – Competition (Lunch from 11:30-12:00)

PURPOSE OF CHALLENGE: To assess the contestant's problem-solving skills relating to the installation, operation, maintenance and repair of Refrigeration systems.

SKILLS AND KNOWLEDGE TO BE TESTED:

1. Refrigeration piping assembly; including cutting, bending, brazing, and flaring.
2. Design and assembly of a refrigeration electrical control circuit.
3. System commissioning, including; pressure testing, evacuation, and charging.
4. Application of safe work practices

PREREQUISITES:

- Thorough knowledge of the refrigeration cycle.
- The ability to use refrigeration tools and specialized equipment.
- Knowledge of and compliance with current industry codes and safety regulations.
- The ability to use precision electrical test equipment.

- A good operating knowledge of typical controls used in refrigeration and air-conditioning systems.

EQUIPMENT, TOOLS, MATERIALS TO BE PROVIDED BY COMMITTEE:

- All hand tools, testing equipment, and specialized equipment and consumables will be provided by the organization.
- Any additional safety equipment that may be required

EQUIPMENT, TOOLS, MATERIALS TO BE SUPPLIED BY COMPETITOR:

- Contestants must provide their own person protective equipment.
- Contestants must wear the appropriate clothing and standard safety gear. (CSA approved safety boots and safety glasses as required for the function they are performing).

NATIONAL COMPETITION ELIGIBILITY:

- A mark of **70% or higher** must be scored by the gold medalist to attend the National Skills Competition

WORKSITE SAFETY RULES / REQUIREMENTS:

- As per Red River College shop/lab policies.

THE IMPORTANCE OF ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES;

Essential skills are used in nearly every job and at different levels of complexity. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Good Essential Skills means you will understand and remember concepts introduced in technical training. The level of Essential Skills required for most trades is as high as or higher than it is for many office jobs.

The following 9 skills have been identified and validated as key essential skills for the workplace: Numeracy, Oral Communication, Working with Others, Continuous Learning, Reading Text, Writing, Thinking, Document Use, and Digital.

Essential skills required for Refrigeration and Air Conditioning: All areas required.

FOR MORE INFORMATION, PLEASE CONTACT:

Brad Peters
Academic Coordinator; Refrigeration
Red River College
2055 Notre Dame Ave. T2-28A
Email: bpeters30@rrc.ca
Phone: 204-632-3034