



2024 Lakeland Regional Skills Canada Competition

Contest Description (Scope Document)

Lakeland College, Vermilion, AB

April 22, 2024

EVENT: Electrical Installations		LEVEL: Secondary										
DURATION OF CONTEST: 6 HOURS		LOCATION: Trades Centre Carpentry Shop, TC132										
COMPETITION SCHEDULE: <table><tr><td>REGISTRATION</td><td>7:30AM - 7:45AM</td></tr><tr><td>ORIENTATION</td><td>7:45AM - 8:00AM</td></tr><tr><td>COMPETITION</td><td>8:30AM - 3:00PM</td></tr><tr><td>LUNCH</td><td>11:30AM - 12:00PM</td></tr><tr><td>AWARDS CEREMONY</td><td>4:00PM</td></tr></table>		REGISTRATION	7:30AM - 7:45AM	ORIENTATION	7:45AM - 8:00AM	COMPETITION	8:30AM - 3:00PM	LUNCH	11:30AM - 12:00PM	AWARDS CEREMONY	4:00PM	REGIONALIZED: NO
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AWARDS CEREMONY INFORMATION: Alumni Hall (AH Cafeteria)												

CONTEST INTRODUCTION

The purpose of the Secondary Electrical competition is to provide high school students (referred to as secondary competitors) with an opportunity to compete with their peers in the practical application of the Canadian Electrical Code. It is understood that secondary students have not had the opportunity to attend post-secondary electrical training. However, many students are able to learn electrical skills via their high school programs, work experience (s) and/or RAP placements.

SKILLS AND KNOWLEDGE TO BE TESTED

- Interpreting and using basic electrical design & diagrams of a physical facility.
- Wiring (AC90 & NMD) a sub panel and various branch circuits using standard trade practices, complying with relevant sections of the current CEC. Wiring will be fished/pulled to various circuits.
- Basic conduit bending. (EMT) may include offsets, saddles, 90 degree bends and strapping.
- Determining adequate protection for equipment and components.

PROJECT DESCRIPTION

Competitors will be introduced to basic skills of the electrical wiring trade. They will interpret and use basic electrical design and diagrams, wall mount a panel, and determine the adequate protection for equipment and components.

UNIFORM

All clothing shall be neat and clean. No ripped or torn clothes allowed. Casual wear such as shorts will not be permitted. No loose fitting clothes or jewelry.

EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply: (Lakeland College Committee can provide also)

Pencil	Measuring tape (metric)	Side cutters
Long nose pliers	Flat screwdrivers	Water pump pliers
Hacksaw and blades	Linesman pliers	
Claw hammer	Robertson screwdriver(black/red/green)	Philips screwdriver
Wire strippers	Electricians' knife (no snap off blades)	5/8" Auger bit
Tapping tools (6/32 & 8/32)	Magnetic torpedo level	Half round or round file

Equipment and Materials Supplied by the Committee:

Cordless Drills (Competitors must use drills provided by the Committee)	Conduit benders
Ladders	Canadian Electrical Code – current edition (will be available for use)

*** No additional power tools or power tools accessories will be allowed during the competition.**

*** Any tool or equipment not contained in the scope will be inspected and approved/removed by committee member.**

JUDGING CRITERIA

- Observance of Occupational Health and Safety rules
- Observance of Canadian Electrical Code regulations
- Interpretations of diagrams, plans and estimates
- Installation techniques
- Planning and organization of work
- Choice and economical use of materials
- Installation techniques: location of devices and conduit
- Verification of function
- Identification of circuit breakers
- Connection of conductors
- Housekeeping

TIE BREAKING PROCESS

- Compare overall time used by competitors to complete the project

RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all modules are located at the following website:

<https://education.alberta.ca/career-and-technology-studies/programs-of-study/>

CLOTHING REQUIREMENT

It is important that competitors present a professional image and appearance. Appropriate work clothing must be worn to compete. All clothing must be neat and clean and free of rips and tears. Casual wear such as shorts will not be permitted. No loose fitting clothes or jewelry.

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.

SAFETY REQUIREMENTS:

Competitors must provide their own safety equipment (all equipment must be CSA approved). Safety must be worn at all times on the competition site. No contestant will be allowed to take part in the competition if they do not have the required equipment or if they do not follow the safety rules and regulations. Required safety equipment consists of:

- Hard hat
- Steel toed work boots
- Safety glasses or goggles
- Gloves

ADDITIONAL INFORMATION

- All tools may be inspected before the competition.
- Electrical outlets will be made available for each competition site.
- No electronic devices are allowed during the competition

Lunch will be provided for all competitors. Unfortunately, all allergies may not be able to be accommodated for. Please connect with the local Regional Coordinator, Neil Napora, for more information. neil.napora@lakelandcollege.ca

Parking information & venue maps:

https://www.lakelandcollege.ca/en/resources/Vermilion_CampusMaps.pdf

Regulations & Policies: A copy of the Skills Canada Alberta Regional Regulations & Policies can be found at the following link: <https://skillsalberta.com/policies-and-procedures>

COMMITTEE MEMBER

DAVID BATES
