SkillsCanada PrinceEdwardIsland

CONTEST DESCRIPTION

Competition Date	Thursday, April 3, 2025
Competition location	Holland College Waterfront Campus
Trade Number	18
Trade Name	Electrical Wiring
Level	Secondary

1. INTRODUCTION

1.1 Purpose of the Challenge.

To evaluate the contestants' ability to perform specific tasks relating to electrical construction wiring in the commercial and residential sectors. Entrants should have knowledge in AC and DC theory, practical wiring skills, and safe working practices.

1.2 Duration of contest.

7 Hours

8:00 am Registration and time for competitors to become familiar with the location and equipment.
8:15 am Introductions; details of the competition; question and answer session.
8:30 am Competition begins
10:15 am Break (15 minutes)
10:30 am Competition resumes
12:00 pm Lunch break (lunch will be provided to the competitors)
12:30 pm Competition resumes
2:15 pm Break (15 minutes)
2:30 pm Competition resumes
3:30 pm Judging

1.3 Skills and Knowledge to be tested.

- Demonstrate the ability and competency in reading blueprints and specifications
- Safe use of hand and power tools
- Quality, accuracy, and thoroughness in workmanship
- Ability to complete an assignment in a given time
- General work attitude

Competitors should be familiar with residential and commercial wiring methods, including but not limited to: installation of cable and conduit; installation of device and junction boxes; and circuiting.

Competitors will be given an elevation drawing indicating location and wiring of devices. Entrants must be able to accurately place (measured) devices according to the drawing.

A practice day can be arranged at Holland College – Waterfront Campus for any entrants who wish additional skills and safety awareness training.

2. CONTEST DESCRIPTION

Tasks that may be performed during the contest:

· Measuring and marking dimensions on a work surface using scale plans and drawings based on the metric or imperial measuring system.
· Measuring and accurately marking the location of outlets and drilling holes on control panels, Installing electrical equipment, cables, conduit, tubing and raceways.
· Measuring and bending tubing and conduit, Measuring, cutting, drilling, deburring metals and plastics, assembling components using screws, staples and bolts.
· Linking lines and equipment to control panels and their components.
· Wiring and connecting electrical components.
· Identifying and marking conductors according to plans and drawings.

3. SKILLS FOR SUCCESS

In response to the evolving labour market and changing skill needs, the Government of Canada has launched the new Skills for Success (former Essential Skills) model defining nine key skills needed by Canadians to participate in work, in education and training, and in modern society more broadly. SCC is currently working with Employment and Social Development Canada (ESDC) to bring awareness of the importance of these skills that are crucial for success in Trade and Technology careers.

Part of this ongoing initiative requires the integration and identification of the Skills for Success in contest descriptions, projects, and project documents.

The following 9 skills have been identified and validated as key skills for success for the workplace in the legend below:

Numeracy, Communication, Collaboration, Adaptability, Reading, Writing, Problem Solving, Creativity and Innovation, Digital

4. EQUIPMENT, MATERIAL, CLOTHING

4.1 Each competitor is required to bring the following:

It is recommended competitors or their instructors call the Holland College representative for tooling requirements) The minimum tools required are listed below.
Electrician's Tool Pouch/with belt or toolbox
9" Linesman Pliers
8" Diagonal Side Cutters
7" or 8" Needle Nose Pliers
Wire Strippers (Ideal or equivalent)
#8 Red Screwdriver (Robertson Head)
#6 Green Screwdriver (Robertson Head)
Slothead Cabinet Screwdriver(med)
Electrical Knife
Measuring Tape (16')
Continuity tester and/or Multimeter (optional)
Hacksaw
Cordless drill and bits (optional)
Canadian Electrical Code book – Several competition copies will be provided.

4.2 Equipment and material provided by the competition site

½" to 1" knockout punches
EMT benders

4.3 Required clothing (Provided by competitor)

C.S.A approved work boots (green triangle)
Safety glasses (Z87)
Clothing to be clean, neat and tidy, (close fitting)

5. ASSESSMENT

5.1 Contest evaluation will be based on the following:

Observing applicable Occupational Health and Safety rules and regulations
Observing Canadian Electrical Code rules and regulations
Ability to follow plans and specifications.
Installation techniques
Planning and organization of work
Proper use of materials and economy of the use of materials
Verification of proper operation
The competition will consist of a practical installation using conduit and NMD-90 wiring.

The evaluation will test the competitor's ability to do an installation according to given plans and specifications. The competitor should be well versed in Health and Safety regulations, Electrical Code regulations, and the ability to work from a given set of written instructions and electrical schematic and/or wiring diagrams. Upon completion a live circuit test will be made to verify all wiring. This circuit test shall be supervised by a Red Seal Electrician. Contestants will be evaluated by a judge or judges using a numerical based scoring system. If a tie results between two or more competitors, the tie breaker will be based on project completion time or if projects are not complete the project that is the most complete shall determine placement.

6. ADDITIONAL INFORMATION

6.1 Tie (No ties are allowed)

Ties will be broken by time completed.

6.2 Competition rules

Please refer to the competition rules for all general PSC information.

7. CONTACT INFORMATION

Name	Email address
Ray Murphy, Learning Manager Provincial Technical Chair	(902) 888-6428 rgmurphy@hollandcollege.com
Tawna MacLeod – Executive Director, Skills Canada PEI	tmacleod@hollandcollege.com