

DATE	LOCATION
Tuesday, April 23, 2024	Building Trades Advancement College IBEW Local 625
TIME	TASK
7:30 am – 8:00 am	Orientation
8:00 am – 10:00 am	Project
10:00 am – 10:15 am	Break
10:15 am – 12:15 am	Project continues
12:15 am– 12:45 pm	Lunch (provided)
12:45 pm– 2:45 pm	Project continues
2:45 pm– 4:00 pm	Judging

2. Purpose of the Contest

Assess the competitor’s skills and abilities at performing various installation tasks in the field of residential and commercial electrical wiring.

3. Criteria

There is a six (6) hour time limit for this competition, therefore time will be a factor. The first person to complete, however, may not be the winner. If the time expires, you will be marked on what you have completed. If time allows, the competitor is permitted to redo any skills that they feel may improve their marks.

All work must be completed according to the current CEC specifications and diagrams / blueprints. Quality of work, including neatness, and compliance with rules and regulations will be evaluated.

4. Number of Stations / Allocations

There is a maximum of ten (10) spaces available.

5. Skills & Knowledge to be Tested

Throughout the final contest, contestants can expect to be evaluated in one, two, three or all of the following areas:

- Installing residential, commercial wiring and control systems;
- Installing branch circuit components;
- Installing heating equipment and components;
- Installing warning devices and various types of detectors.

6. Prerequisites

Contest-Specific Prerequisites

Contestants may be asked to provide the following documentation- we ask competitors to be prepared to provide:

- Completion of provincially recognized a safety orientation course (example: “CELT” or “Safe at My Job”) and WHMIS course;
- Journeyperson or instructor consent for use of power and hand-tools or documentation confirming the competitor has completed online tool training, for example “Safety NET”.

Contestants **must demonstrate mastery of the following technical skills:**

- Measuring and marking dimensions on a work surface using scale plans and drawings based on both metric and imperial measuring systems;
- Installing electrical equipment, cables, conduit, tubing and raceways;
- Measuring, sawing, drilling and 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.

Contestants **must demonstrate mastery of the following theoretical skills:**

- Reading, interpreting and executing plans, drawings, diagrams and schematics in compliance with standards;
- Knowledge of electrical materials and construction work methods;
- Knowledge of basic electrical circuits along with devices and equipment;
- Knowledge of OH&S standards and regulations;

- Knowledge and application of electrical code requirements in Canada and
- Installation to comply with CEC 2021 edition.

SCNS Prerequisites

- Secondary level competitors must meet the following criteria in the current school year:
- Attend a public or private recognized secondary institute, or be enrolled in a registered home school program through the Nova Scotia Department of Education and Early Childhood Development (EECD);
- Be between 13 and 21 years of age on January 1 of the year of the Competition. Competitors are responsible for verifying this information, if requested.
- Have been earning junior or senior high school credits any time during the current academic year (September to June);
- Be registered as a competitor with Skills Canada – Nova Scotia;
- Possess Canadian citizenship or Landed Immigrant status and be a resident of Nova Scotia; or be a registered International Student. Competitors are responsible for verifying this information, if requested;
- Have completed and submitted a signed release form by a parent or guardian if under the age of 19.

7. Equipment & Clothing

a) What Will Be Supplied

- A ladder;
- ½" EMT Bender;
- All power tools (cordless drill)

b) What Competitors Must Supply

- CSA-approved safety gear (hard hat, boots, safety glasses and gloves);
- Supplies for writing and drawing, i.e. pencil, eraser;
- Metric/Imperial measuring tape;
- Set of screwdrivers (Robertson, Flat and Phillips);
- Pliers (Linesman, Needle nose and Side cutting);
- Electrician's knife;
- Wire Strippers ;
- Torpedo Level;
- Pump pliers (Channel Channel-Locks);
- Claw Hammer;
- Hack-saw (32 TPI blade)

- Current edition of the Canadian Electrical Code Book CSA C22.1

PLEASE NOTE: Safety equipment must be worn at all times on the competition site while complying with occupational health and safety regulations. Rings, chains, metal watches etc. will not be permitted while the competition is in progress. Contestants' clothing must be neat and clean in appearance (torn, lose, or ripped clothing will not be permitted).

8. Evaluation & Judging Criteria

POINT BREAKDOWN	/ 100
Operation	35
Equipment/Component Installation	10
Use of Supplies	5
Measurement	10
Cable Installation	10
Conduit Installation	10
Connection of Conductors	10
OH&S Compliance	10
TOTAL	_____ / 100

9. Additional Information

Tie-break procedures:

- a) Project time completion;
- b) Operation score;
- c) Conduit Installation;
- d) Connection of Conductors;

10. PTC Contact Information

Name	Employer	Email	Position
John Harding	IBEW Local 635	jharding@ibew625.ca	Chair
Jennifer Geddes	NSCC Ivany Campus	jennifer.geddes@nsc.ca	NTC

