

Cariboo Regional Skills Competition

Scope Document

Plumbing (Post-Secondary) (2023)

Thompson Rivers University March 3, 2023





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Purpose of the Challenge:

To assess the competitors' knowledge and skills of plumbing materials and assembles with high regard top to the aspects of quality, workmanship and accuracy of work within a specified time frame.

Skills & Knowledge to be Tested:

- Application of Mathematical concepts involving piping and piping layouts
- Reading and interpreting diagrams and specifications
- Assembly of pipe and fittings, consisting of:
- Copper soft solder (lead free)
- Use of Cast Iron pipe
- Use of system 15 drainage and vent pipe
- Measurements to be taken from horizontal and vertical bench marks
- Safe work practices.

Equipment / Tools / Materials

Supplied by Committee:

- B tank and torch
- Tri-pod
- Cordless drill
- Adhesives and cements
- Sand cloth
- Pastes
- Soldering materials
- Pipe cutters for copper pipe
- Deburring tool
- Striker for torch
- All work stations will be supplied with required materials





Equipment / Tools / Materials

Supplied by Contestant:

Suggested List

- Pocket Calculator
- Measuring tape in millimeters and standard
- Channel lock / water pump pliers
- Torpedo level
- 24" level
- Assorted adjustable wrenches (8" and 12" recommended)
- Wrench set (1/4 to 3/4 recommended)
- Hacksaw with spare blade
- Assorted flat blade screwdrivers
- Assorted Phillips screwdrivers
- Assorted Robinson screwdrivers
- Assorted nut drivers
- 16oz claw hammer
- Plumb bob
- Tri square
- Utility knife
- Safety glasses
- Gloves





Safety

- It is mandatory for all competitors to wear CSA approved eyewear (including side shields for prescription eyewear).
- It is mandatory for all competitors to wear CSA approved footwear
- Jewelry such as rings, bracelets and necklaces or any items deemed unsafe by the Judges shall be removed.
- Proper shop attire is to be worn (no loose straps, baggy sleeves). Any attire that is deemed unsafe by the Judges will not be permitted.
- Competition Judges will have final authority over matters of safety.
- Competitors should be under the age of 29 years and tied to the school through training (i.e. apprenticeship)

Judging Criteria

| Accuracy of Installation | 50% |
|--------------------------|------|
| Quality of Workmanship | 30% |
| Pressure Testing | 10% |
| Safety | 10% |
| Total | 100% |
| | |

Technical Committee Chairs:

Gerry Sargent – <u>gsargent@tru.ca</u>, and Audrey Curran – <u>acurran@tru.ca</u>

