



Cariboo Regional Skills Competition

Scope Document

Plumbing (Post-Secondary) (2020)

Thompson Rivers University
(March 6, 2019)

Plumbing (Post-Secondary) (2020)

Purpose of the Challenge:

To assess the competitors' knowledge and skills of plumbing materials and assemblies with high regard 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:
 - Black iron threaded
 - Copper soft solder (lead free)
 - Silver soldering
- Measurements to be taken from horizontal and vertical bench marks
- Safe work practices.

Equipment / Tools / Materials

Supplied by Committee:

- Power vise
- B tank and torch
- Pipe threader's
- Tripods
- Cordless drill
- Adhesives
- Teflon
- Pastes
- Soldering materials
- 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 ($\frac{1}{4}$ to $\frac{3}{4}$ recommended)
- Hacksaw with spare blade
- Assorted flat blade screwdrivers
- Assorted Phillips screwdrivers
- Assorted Robinson screwdrivers
- Assorted nut drivers
- 16oz claw hammer
- Plumb bob
- Pipe wrenches 12" and 14"
- Pipe cutters for copper pipe
- Pipe cutters for plastic pipe 1 1/2" to 4 "
- Mini copper pipe cutters
- Tri square
- Deburring tool
- Striker for torch
- 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 Chair:

Pat Barringer pbarringer@tru.ca