

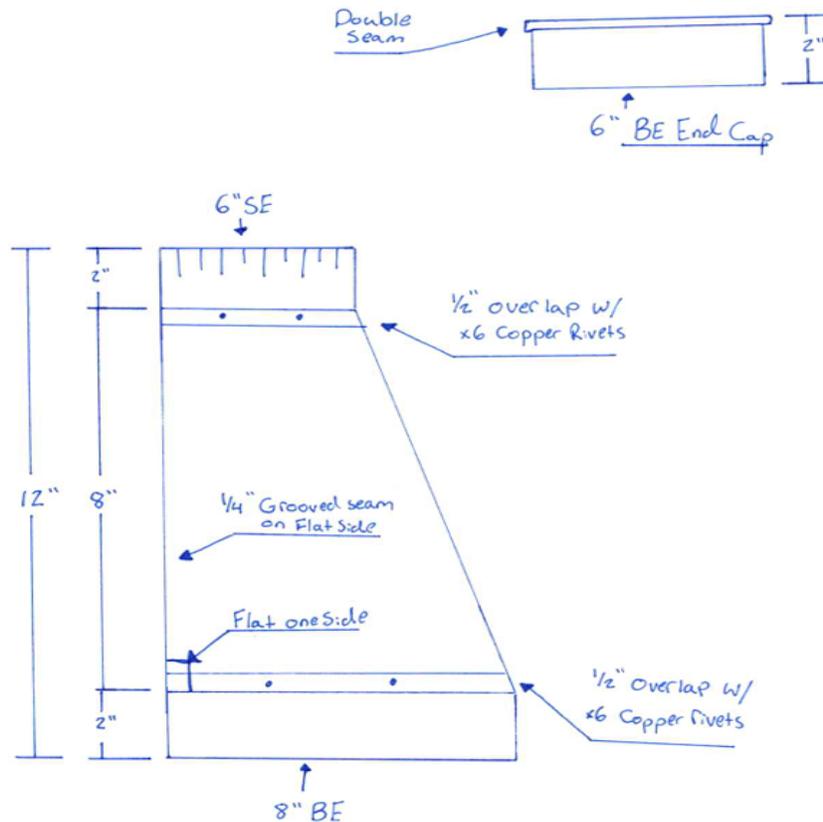
# Skills Project 2026

Location:  
Hvactech Systems Inc. Metal Shop  
133 Titanium Way  
Y1A0E7

Start: 9am  
Finish: 3pm  
Duration: 5 hours w/ 1 hour break

The Territorial Competition will be broken into 2 stages.

1. Layout of a Round-to-Round Reducer.
2. Fabrication of a Copper Round-to-Round Reducer and Endcap



## Stage 1: 1 hour

- Layout the body of the round-to-round reducer on the provided galvanized sheet.
- Full Pattern.
- 8" big end to 6" small end
- 8" finished length of the body
- Flat on one side
- Include allowances for 1/4" grooved seam on flat side.
- Clearly Scribe all allowances, including 1/2" overlap for each collar.
- Clearly indicate Stretch-out length of each end in marker.

## Stage 2: 4 Hours

- Fabricate the above fitting.
- 8" Big-end to 6" Small end round-to-round reducer.
- 8" Finished body length.
- Flat on one side.
- 1/4" Grooved seam on flat side.
- Each collar is attached to the body by a 1/2" overlap using 6 evenly spaced copper rivets.
- Each collar is 2" tall finished
- Each collar is joined by a 1/2" dimpled overlap
- Total Project height including both collars is 12"
- Fabricate a 6" big-end end cap, 2" finished height, using a double seam that fits snugly over the 6" small end of the reducer.

