



2024 Commercial Team Competition

FACT SHEET

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About the Commercial Team Competition

Four craft journey-level professionals work as a team to complete a series of craft-specific tasks focused on electrical, plumbing, sheet metal/HVAC and carpentry in a six-hour period. This includes journey-level professionals that have competed in a prior NCC commercial team competition/demonstration; those competing in the same or a different craft that makes up the NCC commercial team competition may only compete one time. Journey-level professionals who competed as an apprentice in the National Craft Championships ARE eligible to compete in the commercial team competition one time. Team competitors will not be required to take a written assessment. Controlled copies of the craft specifications and drawings will be given to the teams during orientation. No copies of these documents will be allowed to leave the competition area.

Competition Objectives

- Demonstrate safety along with craft interdependency and teamwork
- Simulate working conditions where planning is critical to success
- Highlight individual leadership and workmanship skills as the project is assembled and completed

Tools

The following tools will be provided by ABC:

Carpentry

- Claw hammer
- Nail bags
- Cat's paw nail puller
- Framing square or rafter square
- 25-foot measuring tape
- Two carpenter's pencils
- Markers
- Two-inch level
- Chalk line/chalk
- Right, left and straight tin snips
- Speed square
- Two locking C-clamps (6R or equivalent)
- Flat pry bar
- Knee pads
- Utility knife
- Work gloves (**Fingerless gloves prohibited**)

Carpenters are required to bring the following tools:

- Construction master calculator or equivalent

Plumbing

The following tools will be provided by ABC:

- 10- and 12-inch crescent wrench
- 22-oz. hammer
- 25-foot tape measure
- Chalk line/chalk
- 6- and 10-inch Channellocks
- Copper cutter, up to 1½ inches
- Files
- Framing square
- Level 5 gloves
- Knee pads
- Pencils and markers
- PEX cutter
- PVC saw
- PVC tubing cutter
- Reaming pen
- Torpedo level or 18-inch plumbers' level
- Torque wrench
- 8-inch adjustable wrench
- Utility knife

Sheet Metal/HVAC

The following tools will be provided by ABC:

- Aviation snips
- 10-foot tape measure
- Utility knife
- Gloves
- Flat-tip screwdriver
- 6- or 24-inch level
- Markers
- Knee pads

The following tools sheet metal/HVACs are required to bring:

- Sheet metal hammer
- 12-inch folding tool
- Seamers
- Duct stretchers

Electrical

The following tools will be provided by ABC:

- Large screwdrivers, straight
- Medium screwdriver, straight
- 1/4-inch slotted 4-inch screwdriver
- 3/16-inch cabinet 6-inch screwdriver
- #1 Phillips 3-inch screwdriver
- #2 Phillips 6-inch screwdriver
- Wire stripper/solid and stranded
- Auto voltage/continuity tester
- 12-inch straight-jaw pliers
- 10-inch hex-jaw pliers
- Gloves
- 9-inch lineman pliers
- Diagonal-cutting pliers
- Roto stripper (MC cable)
- EMT conduit reamer screwdriver
- 25-foot tape measure
- Hacksaw with one extra blade
- Torpedo level
- Tool pouch and belt
- Needle nose pliers
- INKZALL marker
- Claw hammer
- Utility Knife

Other tools supplied by ABC:

- Cordless circular saw
- Sawhorses
- Cordless impact gun
- Cordless drill
- Cordless PEX gun

- Cordless sawzall

Judging Criteria

The teams will be judged based on the following criteria.

- Practical evaluation by subject matter experts
- 100% of the team's overall scores will be based on evaluations in the following areas:
 - Safety (individual and team)
 - Individual craft mastery
 - Teamwork
 - Leadership
 - Communication

Specific Competition Eligibility

The team competition has no competition-specific eligibility requirements. Please refer to overall eligibility requirements listed in part one of the guidebook.

2024 Team Competition Scope of Work by Craft

Plumbing Scope

Each plumbing team competitor will be given a scope of work and isometric drawings from which to work and be required to use their math skills to calculate material take-offs and cut lengths of pipe. There will be various types of fittings involved, such as PVC fittings, PEX and hangers that must be installed. Various hand tools and power tools will be used for this project. Installation must follow IBC code requirements.

Sheet Metal/HVAC Scope

Each sheet metal/HVAC team competitor will be given a scope of work, specifications and a set of drawings from which to work. They will be expected to set a furnace to its proper location, install associated ductwork and finish the grille installation.

Electrical Scope

Each electrical team competitor will be issued a written scope of work and drawings. In accordance with the drawings, the competitor will install a breaker panel, receptacle boxes, light boxes and junction boxes.

Competitors will pull Romex wire and land multiple pieces of equipment. There will be low-voltage fixtures as well. Specific boxes will have fixtures that will be tested. All hand tools will be provided.

Carpentry Scope: Framing and Rafters

Each carpentry team competitor will be issued a written scope of work and drawings for the completion of this project. The project will consist of wall layout, wood framing, metal framing, rafters, stair stringer and blocking. All components will need to be plumb, level and square. Being able to read and understand blueprints will be helpful in the coordination of this project. Pre-planning will be necessary to be able to complete this project.