About the Commercial Team Competition
Four craft journey-level professionals will 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. Journey-level professionals may have competed in a prior NCC Commercial Team Competition/Demonstration; this includes competing in the same or a different craft that makes up the NCC Commercial Team Competition. Journey-level professionals who competed as an apprentice in the National Craft Championships ARE eligible to compete, one-time only, in the Commercial Team Competition. 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; and
- Highlight individual leadership and workmanship skills as the project is assembled and completed.

Tools
The following tools will be provided by the team craftsmen.

Carpentry
- Claw hammer
- Nail bags
- Cat’s paw/Nail puller
- Framing square or Rafter Square
- 25’ measuring tape
- Carpenter’s pencils (2)
- Markers
- 2’ level
- Chalk line/Chalk
- Handsaw
- Right, Left and Straight tin snips
- Stair Gauges
- Speed square
- 2 locking C-Clamps (6R or equivalent)
- Flat pry bar
- Knee pads
- Construction Master calculator or equivalent
- Work gloves (Fingerless gloves prohibited)

Plumbing
- Claw hammer
- 25’ measuring tape
- Chalk lines with chalk
- channel lock pliers
- crescent wrench 12” and 10”
- 2’ level
- Torpedo level
- framing square or rafter square
- PVC tubing cutters
- Copper cutter up to 1 ¾”
- file
- PVC saw
- torque wrench
- knee pads
- markers/ pencils
- gloves – level 5

Sheet Metal/HVAC
- Aviation snips
- Sheet metal hammer
- 10’ tape measure (Minimum)
- 12” folding tool
- Seamers
- Flat-tip screwdriver
Level (6” or 24”)
Duct stretchers

Electrical
Hand tools for the electrician on each team will be supplied by NCC.

Other Tools Supplied by NCC
- Cordless circular saw, see the carpentry safety sheet;
- Utility knife with blades(self-retracting);
- Sawhorses
- Cordless impact gun see the carpentry safety sheet.
- Cordless Drill Driver, see carpentry safety scope
- Pex gun, see plumbing safety scope
- Conduit bender

Judging Criteria
The teams will be judged based on the following criteria.
- Practical evaluation by subject matter experts
- 100 percent of the team’s overall scores will be based on evaluations in the following areas:
  - Safety (individual and team);
  - Individual craft mastery;
  - Teamwork;
  - Leadership; and
  - 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.

2020 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 all 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 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 three pieces of equipment. Specific boxes will have fixtures that will be tested. All hand tools will be provided.

Carpentry Scope:
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.