



# TeamWorks

# Career Competition

**Career Cluster:** Architecture and Construction

**State Qualifying Exam:** Yes

**National Contest:** Yes

**Participation:** Teams of 4

### Competition Description

Teams of four students demonstrate their ability to work together in completing a construction project in a “real world” environment. Each team is required to understand the project elements based on a project binder, write a project action plan and present its action plan as one of the key elements of the competition. Competitors must demonstrate their ability to work together as a team by using their carpentry, electrical, plumbing and masonry skills.

### Tasks To Be Evaluated

Build a portion of a residential structure including carpentry, plumbing, electrical, and masonry.

### Clothing Requirement

**National Requirement:**

Official SkillsUSA Khaki short-sleeve work shirt and pants. Black, brown or tan leather work shoes.

**State Requirement:**

National Requirement OR similar "like" clothing.

### Additional Information

Study past national contest specs and plans.

### TeamWorks Mater Time Schedule

**Thursday, April 28**

- 7 a.m. Building opens, teams layout tools for inspection
- 7:30 a.m. At this time teams will be isolated from any outside influence or help until the end of the day. Any questions must be directed to the judges and officials. Tool check starts.
- 8 a.m. Orientation and distribution of plans and spec sheets.
- 8:15 a.m. Teams prepare for presentations
- 9 a.m. Team presentations (presentations are isolated)
- 10 a.m. Construction Begins
- 12 p.m. Lunch Break (box lunch provided)
- 12:30 p.m. Work continues
- 2 p.m. Mandatory 10 minute break
- 2:10 p.m. Work continues for the day
- 4 p.m. First day debriefing



## *TeamWorks*

## Career Competition

### TeamWorks Tool List

All teams must provide their own tools for the competition. These are the tools that you will be allowed to use when competing at state. These tools do not need to be new; but all tools MUST be in safe working order!

#### Safety Equipment:

- 4 Hard Hats
- 4 Pair of safety glasses (sunglasses or tinted safety glasses not allowed, if the contestant wears prescription glasses they must wear goggles over them or have side shields)
- 1 4' and 6' ladder

#### Power Tools:

- 1 7/4" circular saw
- 1 reciprocating saw (blades will be furnished)
- 2 Battery drills, each with 2 batteries and one charger, one can be small impact (screw tips will be provided)
- 1 1/2' (or smaller) electric drill
- 1 12" combination power miter box (no slide or radial miter boxes)
- 1 1/2" angle drill (with this you need to provide hole saws or power feed bits for 1 1/2" - 3" plumbing pipes and paddle bits for copper. Spade bits ranging from 1/4 - 1". You will also need a set of twist bits up to 1/2")
- 1 torch (self-igniting or manual light (supply the ignitor)) with gas

#### Hand Tools:

When there are multiples, they do not all need to be the same.

- |  |  |
|--|--|
| 4 nail aprons or tool belts                          | 2 10" brick trowel                       |
| 4 claw hammers                                       | 1 convex jointer                         |
| 4 speed squares, try squares, or combination squares | 1 mason's chisel                         |
| 4 25" tape measures                                  | 1 utility brush                          |
| 4 utility knives and blades                          | 1 dust pan                               |
| 2 torpedo levels                                     | 2 wood block line pair                   |
| 1 2' level   | 1 brick hammer                           |
| 1 4' level   | 1 6 pc. Screwdriver set                  |
| 1 6' level (a second 4' level may be substituted)    | 1 Diagonal cutting pliers                |
| 1 carpenter's or rafter square:                      | 1 lineman pliers                         |
| 1 pair stair and rafter gauge clamps                 | 1 long nose pliers (needle nose)         |
| 1 4' tee square                                      | 1 wire stripper                          |
| 3 nail sets (3 sizes 1/32, 2/32, 3/32)               | 1 adjustable wrench                      |
| 3 wood chisels (1/2, 3/4, 1")                        | 1 groove-joint pliers                    |
| 1 flat bar   | 1 slip-joint pliers                      |
| 1 nail puller  | 1 locking pliers                         |
| 1 pry bar  | 2 scratch awl                            |
| 1 chalk box and chalk                                | 1 hex key set (allen wrenches)           |
| 2 straight cut aviation snips                        | 1 tubing cutter                          |
| 1 hack saw and blades                                | 1 fitting and tube brush for 1/2" copper |
| 1 brick set  | 1 3/4" brush for copper                  |
|  | 1 conduit bender                         |

### TeamWorks Mater Time Schedule

*continued*

#### Friday, April 30, 2022

- 8 a.m. Construction resumes, again teams are, "on their own" until demolition is started. Construction continues.
- 10 a.m. Mandatory 10-minute break
- 10:10 a.m. Construction continues
- 12 a.m. Lunch Break and Judging (lunch on your own)
- 1 p.m. Debriefing
- 2 p.m. Demolition of projects and clean up

*Any team leaving early may be disqualified from the competition.*