



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:

Class C: Competition Specific: Manufacturing/
Construction Khaki Attire

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

State Requirement:

National Requirement OR

- Khaki short-sleeve work shirt
- Work pants of any kind are acceptable dress (no jeans)
- Black, brown, or tan leather work shoes.
- Any embroidered names or school patches must be covered, if applicable.

TeamWorks Mater Time Schedule

Thursday, April 25

- 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. Mandatory 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



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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 6' and 8' ladder

Power Tools:

- 1 7/4" circular saw
- 1 reciprocating saw
- 2 Battery drills, each with 2 batteries and one charger, one can be small impact
- 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 push broom |
| 2 torpedo levels | 1 dust pan |
| 1 2' level | 2 wood block line pair |
| 1 4' level | 1 brick hammer |
| 1 6' level (a second 4' level may be substituted) | 1 6 pc. Screwdriver set |
| 1 carpenters or rafter square: | 1 Diagonal cutting pliers |
| 1 pair stair and rafter gauge clamps | 1 lineman pliers |
| 1 4' tee square | 1 long nose pliers (needle nose) |
| 3 wood chisels (1/2, 3/4, 1") | 1 wire stripper |
| 1 flat bar | 1 adjustable wrench |
| 1 nail puller | 1 slip-joint pliers |
| 1 pry bar | 1 locking pliers |
| 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 roll solder |
| | 1 container flux |

TeamWorks Mater Time Schedule

continued

Friday, April 26

- 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. Mandatory Lunch Break and Judging (*box lunch provided*)
- 1 p.m. Debriefing
- 2 p.m. Demolition of projects and clean up

Any team leaving early may be disqualified from the competition.



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Additional Information

Congratulations to you and your students on making it to this year's TeamWorks State competition. The TeamWorks Committee is looking forward to providing students with a professional competition that will continue to challenge their skills and prepare them for the next level. Only one team will advance to the national competition, but we hope to bring you an experience that you will carry throughout your career and life.

To best prepare for this year's competition, there are a few points below you should review and share with your competing team. Please make sure to review the Schedule of Events.

General Items:

- Schedule of Events
- Tool List
- Sawhorses will be provided in your materials.
- Mortar will be premixed for teams.

Instructor Notes:

- Teams are allowed to complete wood framing on Day 1
- Mandatory clean-up on Day 2 afternoon following the competition.
- Have the team establish a captain prior to arriving of competition.
- Assist your team in developing a milestone schedule for completing their project.
- Teams will be required to complete a schedule.

***A FUNCTIONAL GFI MUST BE PROVIDED AND USED BY STUDENTS AT ALL TIMES.
IT WILL BE TESTED BY A SAFETY REPRESENTATIVE PRIOR TO USE.***

We look forward to working with you and your students and hope that you find the competition both challenging and rewarding. Our goal is to see the teams do their best, with the skills that you have taught them and for all teams to leave with a sense of accomplishment, having competed their project.

OSHA Certification cards of competitors will be checked at the beginning of the competition on Thursday.