SkillsUSA Carpentry Virtual Project

Scope of the Contest
The contest will assess accuracy, workmanship, the ability to read and interpret blueprints, and the proper use of tools and equipment. Contestants may be required to frame walls using wood studs; cut and install common, hip and jack rafters; stair stringer and install drywall, siding, sheathing, baseboard molding and window trim. Contestants are to submit a written cost proposal of project with current cost of material. A brief introduction of themselves (contestant) to the judges is necessary. 60 to 90 second video to be viewed prior to construction of project.

Contestant # must be visible at all time.

Video of Demonstrated Procedures
Ensure lighting, audio and video are high quality, and focus ONE camera at a distance to show the workspace the contestant is in to ensure they are not receiving any additional support. A clock must be placed within camera shot from beginning to end of contestants’ work period. When task is completed contestant will zoom in on specific components of detail while explaining the skill (explained in blueprint) for judging purposes.

Scoring Information
Submissions items will be judged by industry professionals. Video presentation of contestant competing assigned project should be narrated by student to ensure understanding and clarification to ensure judges accurately score.

Chair will zoom with all advisors and let them know what supplies are needed and the plans for the project.
NYS CARPENTRY (VIRTUAL)

PURPOSE
To evaluate each contestant’s preparation for employment and to recognize outstanding students for excellence and professionalism in the field of residential and commercial carpentry.

ELIGIBILITY
Open to active SkillsUSA members enrolled in programs with carpentry as the occupational objective.

CLOTHING REQUIREMENTS
Contest Clothing Notes (Apply ONLY to Virtual Competitions):
- Contestant clothing options include the following:
  - Trade Appropriate Clothing.
- Clothing must meet industry safety standards.
- No identification of the contestant, school or state is allowed on clothing.
- No offensive, vulgar or inappropriate images or text are allowed on contestants clothing.
- No shorts or sleeveless shirts are allowed.
- Proper Personal Protective Equipment (PPE) must be worn by contestant to meet all state, local and school requirements due to COVID-19. Scoring deductions may only be given and/or disqualification of contestant if clothing safety standards are not met.

Note: Safety glasses must have side shields or goggles (prescription glasses may be used only if they are equipped with side shields. If not, they must be covered with goggles).

SAFETY REQUIREMENT
Both the instructor and the contestant certify by agreeing to enter this contest that the contestant has received instructions and has satisfactorily passed an examination on the safe use of a portable power saw. They also certify that the contestant’s saw has been thoroughly inspected and is in safe working condition.

Further, both the instructor and the contestant agree that NYS SkillsUSA Inc., are released from all responsibility and liability relating to personal injuries resulting from its use. Contestants will be removed from competition if proper training has not been provided and/or they are using the equipment in an unsafe manner.

EQUIPMENT AND MATERIALS
Supplied by the contestant:
1. Computer with high-speed internet capability and camera to use applications such as Zoom, Teams, etc. The minimum recommended internet bandwidth speeds for joining Zoom meetings, accessing on-demand curriculum and other online operations is 2.0 Mbps up and down. You can test your current internet speeds by following this link: https://www.speedtest.net/. Allow the page to load and click on GO.
2. A secondary camera(s) may be required to provide judges with the ability to view contestants from different angles. Additional camera requirements will be located on the NYS SkillsUSA
3. A contest Proctor will be required to be on site to assist judges. A local industry expert is preferred to serve as the Proctor and shall not be an individual that has been involved with the training of the contestant(s). The Proctor will serve as the onsite “hands and eyes” for the judges. Proctor will follow instructions from the judges for safety and operations related to the competition. Proctor may be asked by judges to perform several tasks such as operating a portable camera to show specific components or steps, measure parts, or any task that will provide judges with information needed to assist in accurate scoring of the contestant’s work or presentation. However, the Proctor shall not serve as a judge nor have any influence on contestant scores.
4. The contestant’s instructor or advisor shall be on site to observe all competition activities to ensure a safe and healthy competition experience for all participants. That instructor or advisor will not be allowed to interact or interfere with the competitor unless a safety issue arises that requires interaction. Any other support or interaction between the contestant and the instructor/advisor will result in disqualification.
5. A list of supplies will be provided to the advisors after registration is complete.
6. technical committee
7. Hard hat
8. Safety glasses
9. Cut-resistant Level 3 gloves

**Scope of the Contest**

**Skill Performance**
The contest will assess accuracy, workmanship, the ability to read and interpret blueprints, and the proper use of tools and equipment. Contestants may be required to frame walls using wood and/or steel studs; cut and install common, hip and jack rafters; and install drywall, siding, sheathing, baseboard moldings and window trim.

**Contest Guidelines**
1. Time limit: Contestants will be stopped when time limits, as specified on the contest job sheet, are up; however, contestants may stop whenever they have completed a particular phase of the contest.

**Standards and Competencies**

*Note for Virtual Competitions:* Contestants may not be required to perform all the standards and competencies listed in this section. However, contestants should be prepared to perform components in all areas. Prior to the competition, the technical committee may determine which standards and competencies contestants will be perform for the virtual contests. The technical committee will determine if additional information is needed for contestants prior to the competition. These changes will be posted on the SkillsUSA Championships contest update website at: http://updates.skillsusa.org.

**C 1.0 — Read blueprints and specifications by interpreting dimensions and specifications, as well as door, window and finish schedules while understanding common blueprint abbreviations and symbols**

1.1 Interpret and determine dimensions from multiple view drawings and build the project from plans, elevations, sections and details
1.2 Interpret specifications and drawing notes by verbally demonstrating how specifications are used
1.3 Identify plot plan information such as reference points and bench marks by locating the reference point; using Pythagorean theorem, a level and square, the participant can lay out building as drawn on the plot plan
1.4 Interpret oral and written changes, and incorporate modifications into existing plans
1.5 Understand common abbreviations and symbols, and verbally describe all common blueprint abbreviations and symbols on competition blueprints
1.6 Interpret door, window and finish schedules by describing location, quantity and type of materials

**C 2.0 — Organize building site/materials in a safe and sequential manner while using builder’s level and transit properly**

2.1 Use builder’s level and transit properly for layout and elevation
2.2 Identify, receive and inspect materials and ensure all required materials are in place prior to start of competition by using material lists supplied
2.3 Store lumber and other materials properly by type and use in a safe and sequential manner

**C 3.0 — Build foundations and forms including the construction and alignment of footing forms, wall and wall forms, and column and pier forms**

3.1 Construct and align various footing forms to include keyways, bulkheads, dowels and anchorages, as per plans
3.2 Construct and align foundation wall and wall forms to include pilasters and beam pockets
3.3 Construct and align column and pier forms
3.4 Maintain form materials properly

**C 4.0 — Construct rough framing by identifying and selecting framing members, and installing frame components while meeting OHSA standards**

4.1 Identify framing members and select materials for project
4.2 Frame and install sill plate, girders, floor joists and bridging
4.3 Frame floor
4.4 Install sub-floor
4.5 Build or erect safe scaffolding to meet OHSA standards
4.6 Frame and brace walls to include corners, openings, trimmers, cripples, partitions, plumbing partitions, fixture backing and sheathing
4.7 Frame stair stringer and other components

**C 5.0 — Construct roof framing by determining rafter lengths, making calculations, laying out a plan, framing and installing roof sheathing**

5.1 Identify types and components of roof construction and
verbally describe all typical components of roof construction identified on the competition project blueprint

5.2 Determine rafter lengths from a rafter scale
5.3 Calculate and use the rise and run of a common roof
5.4 Lay out a common roof plan
5.5 Lay out, cut and install common rafters, ridge board, collar ties, gambrel rafters, valley rafters, valley jack rafters, tail rafters, hip rafters, hip jack rafters and cripple jack rafters
5.6 Frame roof openings, dormers and saddles
5.7 Lay out, cut and install roof trusses (purling)
5.8 Install roof sheathing

C 6.0 — Construct exterior finish by installing frames, corner boards, moldings, cornices, siding and shingles as per industry standards
6.1 Install window and doorframes as per competition project blueprint and manufacturer’s standards
6.2 Measure, cut and install trim for window and door frames
6.3 Install corner boards, moldings or metal/vinyl corners within 1/8"
6.4 Install wood, bevel, sheet and lap siding and aluminum or vinyl siding as per competition project blueprint and manufacturer’s recommendations
6.5 Install wood shingles and miter corners as per industry standards
6.6 Install exterior finish rake, open cornice and box cornice as per competition project blueprint

C 7.0 — Construct interior finish while measuring and cutting materials, fitting and hanging doors and trim, constructing closets and installing crown moldings
7.1 Measure, cut and install gypsum board to meet blueprint specs and industry standards
7.2 Cut and install paneling while trimming to fit in prescribed locations
7.3 Fit and hang doors and trim to include swinging, sliding, folding and pocket doors to industry and manufacturers’ standards
7.4 Construct closets and built-in units and install accessories as per competition blueprint specs and manufacturers’ recommendations
7.5 Cut and install crown molding or other moldings within 1/16"

C 8.0 — Build stairs by laying out stringer and stringer sets, calculating rise, run and tread cutting and installing stair treads and stair skirts
8.1 Lay out a straight run stringer and a two-flight stringer set with landing using a carpenter square
8.2 Calculate rise, run and tread width within 1/16"
8.3 Cut and install stair treads and stair skirt within a 1/8" variable

C 9.0 — Identify lumber by writing a requisition for ordering lumber
9.1 Match letters designating uses in plywood or composition board to their current application
9.2 Match at least two examples each of common hardwoods and softwoods to their uses
9.3 Identify types of trim and moldings, and describe use
9.4 Identify common defects in lumber
9.5 Write a requisition for ordering lumber based on a given material list
9.6 Calculate board feet using the standard formula (No. of pieces x thickness in inches x width in inches x length in feet ÷ 12 = board feet)

C 10.0 — Using and maintaining tools safely per manufacturers’ recommendations
10.1 Inspect and properly use hand tools as per manufacturers’ recommendations. Hand tools from the following list: sliding T-bevel, tape measure, combination square/speed square coping saw, keyhole saw, folding rule, hammer, punch, hand saw, nail set, wood chisel, carpenter’s level, and framing square
10.2 Inspect and properly operate power tools as per manufacturers’ recommendations.