



# CARPENTRY DISPLAY

## Arkansas SkillsUSA Championships Technical Standards

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### PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of carpentry through the creation of a high-quality display piece incorporating the Arkansas SkillsUSA logo. Projects are created at the competitor's home facility and brought to the event for display and judging.

First, download and review the General Regulations at [updates.skillsusa.org](http://updates.skillsusa.org).

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### ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with carpentry, cabinetmaking, or woodworking as an occupational objective. This is a state only event. There is currently no advancement to the national level.

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### CLOTHING REQUIREMENTS

#### **Class A: Official Dress •**

Official SkillsUSA white dress shirt or white collarless shirt • Official SkillsUSA red blazer • Black dress slacks or black dress skirt • Black socks or black or tan pantyhose • Black dress shoes

**OR**

### CLOTHING REQUIREMENTS

#### **Class D: Competition Specific —Tan Atire**

Light brown work shirt, brown work pants, black, brown or tan work shoes

These regulations refer to SkillsUSA Championships Clothing Classifications that are pictured and described at [skillsusastore.org](http://skillsusastore.org). If you have questions about competition uniforms, call the SkillsUSA Store at 888-501-2183.

**Note:** Competitors must wear their official competition clothing to the competition orientation and judging interview.

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## EQUIPMENT AND MATERIALS

### **1. Supplied by the technical committee:**

- a. Display tables and area for project presentation
- b. Interview area with seating for judges and competitor
- c. Electrical outlets if needed for project demonstration

### **2. Supplied by the competitor:**

- a. Completed carpentry display project incorporating Arkansas SkillsUSA logo
- b. All materials, hardware, and finishing supplies used in project creation
- c. Project documentation portfolio (see requirements below)
- d. Tools used in project creation for demonstration purposes (optional)
- e. Extension cord if electrical demonstration is part of project
- f. All competitors must create and submit online a one-page single sided resume. See "Online Submission Requirements" below for guidelines.

**Note:** All national competitors must also check for competition-specific updates and/or competitor preparation instructions on the SkillsUSA website at [updates.skillsusa.org](http://updates.skillsusa.org).

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## PROJECT REQUIREMENTS

### **Project Specifications:**

1. **Arkansas SkillsUSA Logo Integration:** The Arkansas SkillsUSA logo must be prominently incorporated as a design element of the project
2. **Maximum Dimensions:** 24" x 24" x 12" (length x width x height)
3. **Weight Limit:** Maximum 20 pounds for safe handling
4. **Originality:** The project must adhere to the plans provided by the state office.



5. **Functionality:** Project should demonstrate both aesthetic appeal and functional purpose
6. **Safety:** Project must be structurally sound and safe for handling and display

## Project Documentation Portfolio:

Competitors must provide a portfolio containing:

1. **Project Planning:**
  - Original design sketches
  - Working drawings with dimensions
  - Material and cut lists
  - Time log documenting hours spent on project
2. **Process Documentation:**
  - Step-by-step construction photos
  - Explanation of joinery techniques used
  - Finishing process documentation
3. **Technical Specifications:**
  - Materials used (species, grades, sources)
  - Hardware and fasteners specifications
  - Finishing materials and techniques
  - Cost breakdown of materials

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## PROHIBITED DEVICES

Cellphones, electronic watches and/or other electronic devices not approved by a competition's national technical committee are NOT allowed in the competition area during judging and interviews. Please follow the guidelines in each technical standard for approved exceptions. Technical committee members may also approve exceptions onsite during the SkillsUSA Championships if deemed appropriate.

## Penalties for Prohibited Devices

If a competitor's electronic device makes noise or if the competitor is seen using it at any time during the competition, an official report will be documented for review by the Director of the SkillsUSA Championships. If confirmed that the competitor used the device in a manner which compromised the integrity of the competition, the competitor's scores may be removed.

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## RESUME SUBMISSION REQUIREMENTS

All Arkansas SkillsUSA State competitors must submit their one-page single sided resume in person to the contest judge.

Failure to submit any of the required document(s) listed below by the established deadline will result in a 10-point penalty.

1. One-page single sided resume

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## SCOPE OF THE COMPETITION

### KNOWLEDGE PERFORMANCE

The competition will include a test assessing the general knowledge of carpentry standards and competencies. Competitors are required to take the SkillsUSA Professional Development Test.

### SKILL PERFORMANCE - PROJECT DISPLAY AND INTERVIEW

The competition consists of two main components:

1. **Project Display Evaluation:** Judges will evaluate the completed carpentry project based on established criteria
2. **Competitor Interview:** Each competitor will participate in a structured interview with judges to discuss their project, construction process, and carpentry knowledge

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## COMPETITION GUIDELINES

### Project Display Evaluation:

1. Projects will be displayed in designated areas for judge evaluation
2. Competitors may not be present during initial project evaluation
3. Projects will be evaluated on craftsmanship, design, functionality, logo integration, and professional presentation
4. Judges will review project documentation portfolios

## **Competitor Interview:**

1. Each competitor will participate in a interview with judges
2. The interview will cover project planning, construction techniques, and problems along the way.
3. Competitors should be prepared to discuss their project thoroughly and demonstrate knowledge of carpentry principles
4. Professional presentation and communication skills will be evaluated

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## **INTERVIEW TOPICS**

Competitors should be prepared to discuss:

- Project design and planning process
- Material selection and justification
- Construction techniques and joinery methods used
- Problem-solving during construction
- Arkansas SkillsUSA logo integration approach
- Finishing techniques and materials
- Safety considerations during construction
- Cost estimation and project management
- Future improvements or modifications
- Career goals and industry knowledge

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## **STANDARDS AND COMPETENCIES**

### **CD 1.0 — Project Planning and Design**

- 1.1. Develop original design concepts
  - 1.1.1. Create detailed working drawings
  - 1.1.2. Calculate material requirements accurately
  - 1.1.3. Plan construction sequence
- 1.2. Integrate Arkansas SkillsUSA logo effectively
  - 1.2.1. Scale logo appropriately for project size
  - 1.2.2. Select appropriate integration technique
  - 1.2.3. Ensure logo is prominent design feature

## **CD 2.0 — Material Selection and Preparation**

- 2.1. Select appropriate materials for project
  - 2.1.1. Choose suitable wood species
  - 2.1.2. Evaluate lumber quality and defects
  - 2.1.3. Calculate material costs effectively
- 2.2. Demonstrate material preparation skills
  - 2.2.1. Mill lumber to required dimensions
  - 2.2.2. Join boards for wider panels if needed
  - 2.2.3. Prepare surfaces for assembly

## **CD 3.0 — Construction Techniques and Craftsmanship**

- 3.1. Execute precision joinery
  - 3.1.1. Create accurate joints appropriate for project
  - 3.1.2. Demonstrate proper assembly techniques
  - 3.1.3. Ensure structural integrity
- 3.2. Apply advanced woodworking skills
  - 3.2.1. Use complex joinery when appropriate
  - 3.2.2. Incorporate curved or shaped elements
  - 3.2.3. Demonstrate attention to detail

## **CD 4.0 — Finishing and Presentation**

- 4.1. Apply professional finishing techniques

- 4.1.1. Prepare surfaces properly
- 4.1.2. Select appropriate finish for project
- 4.1.3. Apply finish evenly and smoothly
- 4.2. Present project professionally
  - 4.2.1. Ensure project is clean and ready for display
  - 4.2.2. Provide complete documentation
  - 4.2.3. Demonstrate pride in workmanship

## **CD 5.0 — Communication and Interview Skills**

- 5.1. Communicate project details effectively
  - 5.1.1. Explain the construction process clearly
  - 5.1.2. Justify design and material decisions
  - 5.1.3. Demonstrate technical vocabulary
- 5.2. Display professional presentation skills
  - 5.2.1. Maintain appropriate eye contact and posture
  - 5.2.2. Answer questions thoroughly and accurately
  - 5.2.3. Show enthusiasm for craft and career

## **CD 6.0 — Safety and Industry Knowledge**

- 6.1. Demonstrate understanding of shop safety
  - 6.1.1. Identify safety procedures used in construction
  - 6.1.2. Explain proper tool usage and maintenance
  - 6.1.3. Recognize potential hazards and solutions
- 6.2. Show knowledge of industry standards
  - 6.2.1. Understand wood properties and behavior
  - 6.2.2. Know appropriate hardware and fasteners
  - 6.2.3. Recognize quality construction practices

## **CD 7.0 — Project Management and Documentation**

- 7.1. Demonstrate project planning skills
  - 7.1.1. Show evidence of planning process
  - 7.1.2. Document time management effectively
  - 7.1.3. Track material usage and costs
- 7.2. Provide comprehensive documentation
  - 7.2.1. Include detailed construction photos
  - 7.2.2. Explain problem-solving approaches
  - 7.2.3. Reflect on learning experiences

## **CD 8.0 — Employability**

8.1. Exhibit personal skills such as attendance, time management, individual responsibility and teamwork

8.2. Practice good customer relations

8.3. Fill out job application completely and legibly

8.4. Maintain professional conduct and appearance

8.4.1. Demonstrate polite, attentive attitude

8.4.2. Wear neat, clean clothing and be well groomed

8.5. Respect property and materials

## **CD 9.0 — SkillsUSA Framework**

The SkillsUSA Framework is used to pinpoint the Essential Elements found in Personal Skills, Workplace Skills, and Technical Skills Grounded in Academics. Students will be expected to display or explain how they used some of these Essential Elements. For more, visit: [www.skillsusa.org/who-we-are/skillsusa-framework/](http://www.skillsusa.org/who-we-are/skillsusa-framework/).

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## **COMMITTEE IDENTIFIED ACADEMIC SKILLS**

The technical committee has identified that the following academic skills are embedded in this competition.

### **Math Skills**

- Solve single variable algebraic expressions
- Calculate area, perimeter, and volume
- Work with fractions and decimal conversions
- Apply geometric principles
- Calculate material requirements and waste factors
- Use proportional scaling
- Apply trigonometric functions for angles
- Perform cost calculations and budget management

### **Science Skills**

- Understand properties of wood and wood products
- Apply principles of structural engineering
- Understand adhesion and cohesion principles
- Apply knowledge of thermal expansion and contraction
- Understand moisture content effects on wood
- Apply principles of friction and mechanical advantage
- Understand finishing chemistry

### **Language Arts Skills**

- Demonstrate comprehension of technical drawings and specifications
- Use appropriate technical vocabulary
- Communicate project requirements effectively
- Document project processes and procedures
- Present information clearly and professionally
- Read and interpret manufacturer instructions

## CONNECTIONS TO NATIONAL STANDARDS

State-level academic curriculum specialists identified the following connections to national academic standards.

### Math Standards

- Numbers and operations • Algebra • Geometry • Measurement • Data analysis and probability • Problem solving • Communication • Connections • Representation

### Science Standards

- Understands the structure and properties of matter • Understands the sources and properties of energy • Understands forces and motion • Understands the nature of scientific inquiry • Understands the scientific enterprise

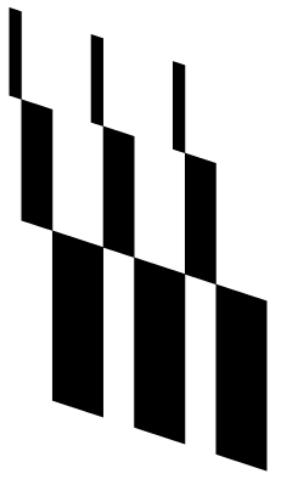
### Language Arts Standards

- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge

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### Source References:

- NCTM Principles and Standards for School Mathematics: [www.nctm.org](http://www.nctm.org)
- IRA/NCTE Standards for the English Language Arts: [www.ncte.org/standards](http://www.ncte.org/standards)



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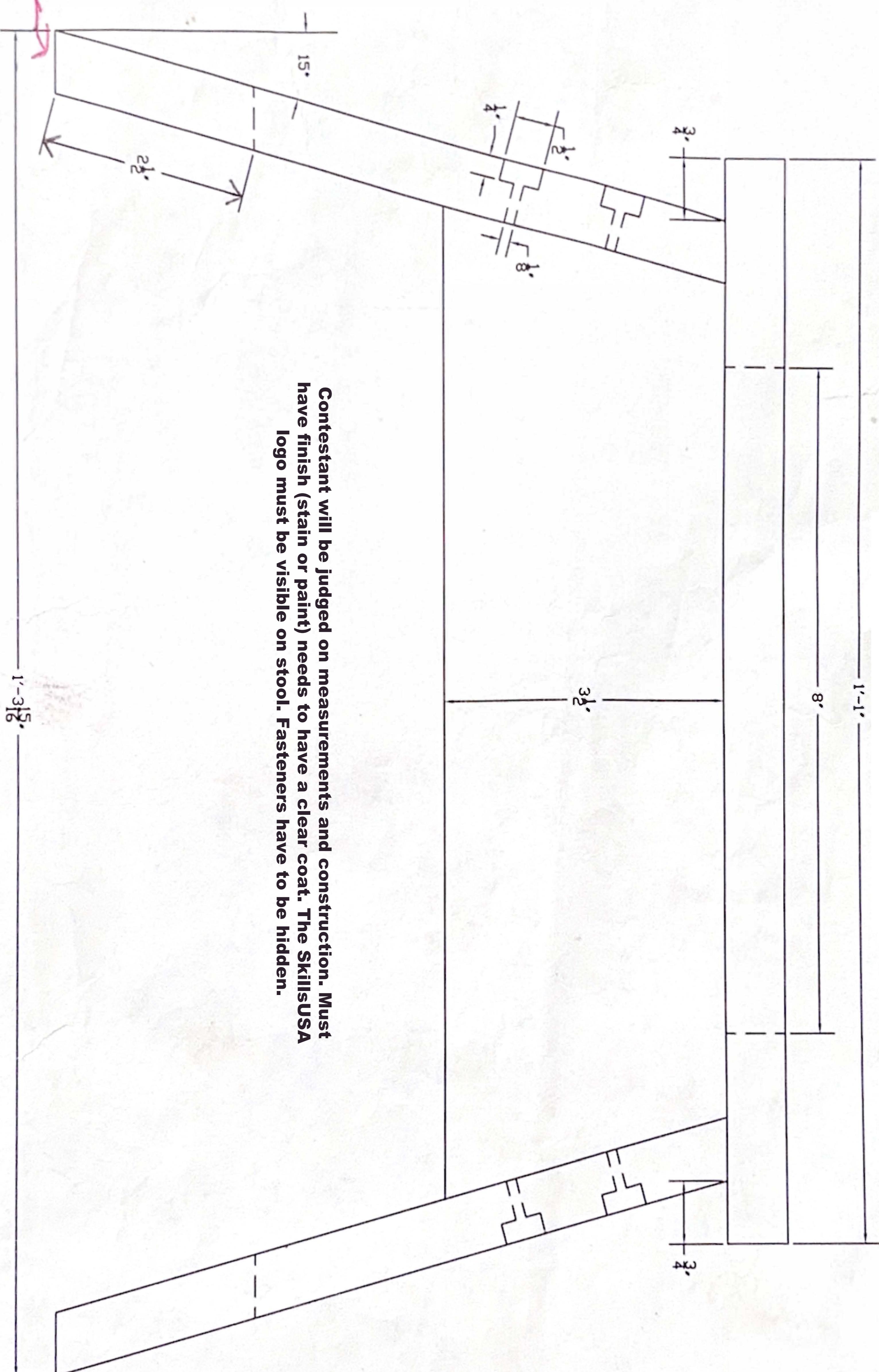
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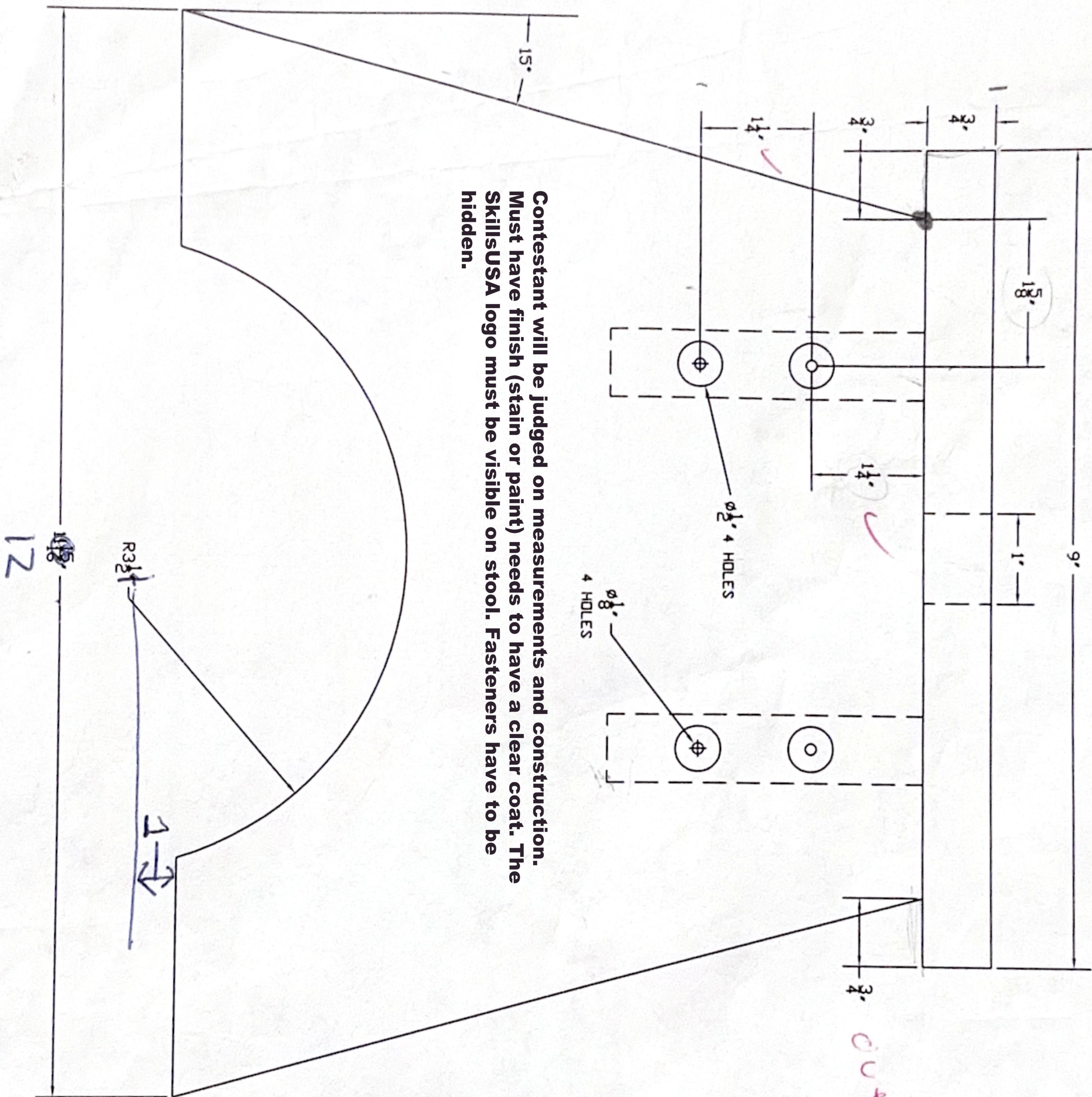
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**Contestant will be judged on measurements and construction. Must have finish (stain or paint) needs to have a clear coat. The SkillsUSA logo must be visible on stool. Fasteners have to be hidden.**

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