



BUILDING MAINTENANCE



SkillsUSA Championships Technical Standards

PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students in the field of Building Maintenance.

First, download and review the General Regulations at: www.updates.skillsusa.org.

ELIGIBILITY

Open to active SkillsUSA members enrolled in career and technical programs with entry-level job skills as the occupational objective. A letter from the appropriate school official on school letterhead stating that the competitor is classified under the provisions of Public Law 105-17, Individuals with Disabilities Education Act, 1997, is required for participation. State associations having restrictions on the release of this information may submit a letter of eligibility on school letterhead that simply states: "I certify that [student name] meets the eligibility requirements for the SkillsUSA Championships Building Maintenance competition. Signed [school official]." The eligibility letter is to be presented to the competition chair at the competitor orientation meeting.

CLOTHING 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

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.)

These regulations refer to clothing items that are pictured and described at www.skillsusastore.org. If you have questions about clothing or other logo items, call 1-888-501-2183.

Note: Competitors must wear their official competition clothing to the competition orientation meeting.

EQUIPMENT AND MATERIALS

1. Supplied by the technical committee:
 - a. Materials, supplies and equipment
2. Supplied by the competitor:
 - a. One pair of plastic or rubber gloves with three-quarter sleeves
 - b. Hearing protection devices
 - c. All competitors must create a one-page resume. See “Resume Requirement” below for guidelines.

RESUME REQUIREMENT

Competitors must create a one-page resume to submit online. SkillsUSA national competitors should submit their resume by June 1. The link for resume submission will be published on <http://updates.skillsusa.org> on May 1. Failure to submit a resume will result in a 10-point penalty.

Your resume must be saved as a PDF file type using file name format of “Last Name_First Name.” For example, “Amanda Smith” would save her resume as **Smith_Amanda**. If you need assistance with saving your file as a PDF, visit [the Adobe website](#) for more information.

Note: Check the Competition Guidelines and/or the updates page on the SkillsUSA website at <http://updates.skillsusa.org>.

PROHIBITED DEVICES

Cell phones or other electronic devices not approved by a competition’s national technical committee are **NOT** allowed in the competition area. 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 SkillsUSA Championships director. If confirmed that the competitor used the device in a manner which compromised the integrity of the competition, the competitor’s scores may be canceled.

SCOPE OF THE COMPETITION

Competitors may be asked to provide an oral explanation of a procedure or to answer a question. Competitors in this event are also exempt from the professional development test. Competitors will need basic knowledge of cleaning and maintenance, safety and customer service for the skill performance activities.

KNOWLEDGE PERFORMANCE

The competition does not require a written knowledge test.

SKILL PERFORMANCE

The competition will ask participants to demonstrate their ability to perform tasks selected from the following list of competencies as determined by the SkillsUSA Championships technical committee.

The competition areas may include, but are not limited to carpet care, office cleaning, floor care and liquid measurement.

COMPETITION GUIDELINES

1. Competitors may be asked to provide an oral explanation of a procedure or to answer a question.
2. Careful instruction and explanation of all tasks to be completed will be given to each competitor in both oral and written form to ensure that he or she fully understands the assigned task.
3. Time limits will be assigned for each task, but no bonus points will be awarded for early completion.
4. The judging criteria and points assigned will be determined by the difficulty of the tasks assigned.

STANDARDS AND COMPETENCIES

BLMT 1.0 — Apply knowledge of proper floor maintenance and floor maintenance machinery to care for a variety of surfaces including carpeted, hardwood, vinyl and tile

- 1.1. Vacuum, scrub, dust mop and wet mop various surfaces
- 1.2. Vacuum carpeted surfaces
- 1.3. Strip wax and clean hardwood, vinyl and tile surfaces
- 1.4. Operate a floor buffer
- 1.5. Identify types of surfaces and care needed for proper maintenance
- 1.6. Demonstrate ability to read and comprehend instructions

BLMT 2.0 — Perform proper carpet vacuuming, shampooing, water extraction and stain removal

- 2.1. Vacuum carpeted area
- 2.2. Bonnet clean carpeted area
- 2.3. Shampoo carpeted area by rotary floor machine or dry foam

- 2.4. Perform hot water extraction on carpeted area
- 2.5. Remove stains or spots from carpeted area
- 2.6. Define carpet terms

BLMT 3.0 — Implement knowledge of custodial chemical measuring, mixing and safety

- 3.1. Implement steps and procedures to measure and mix chemicals
- 3.2. Demonstrate knowledge of custodial chemical terminology
- 3.3. Indicate knowledge and use of Material Safety Data Sheets (MSDS)

BLMT 4.0 — Demonstrate knowledge and use of safety practices in custodial applications

- 4.1. Demonstrate knowledge of safe work practices in custodial services
- 4.2. Demonstrate knowledge and practice of safety in use and handling of electrical equipment
- 4.3. Demonstrate knowledge and use of safety practices when using ladders
- 4.4. Demonstrate knowledge and use of safety practices in the measuring and mixing of chemicals
- 4.5. Indicate knowledge of color codes used in custodial cleaning equipment

BLMT 5.0 — Clean offices and classrooms to make the rooms hygienic and attractive

- 5.1. Apply knowledge and procedures in cleaning office spaces and classrooms
- 5.2. Apply knowledge and use of tools, methods, supplies and equipment to make the rooms clean, hygienic and attractive

BLMT 6.0 — Employ proper window maintenance techniques to wash and clean windows

- 6.1. Wash windows using correct tools, supplies and equipment
- 6.2. Clean blinds, shades and shutters of various types

BLMT 7.0 — Clean and maintain walls with a variety of surfaces including painted, tiled, papered and plastered

- 7.1. Clean various wall surfaces including painted, tiled, papered and plastered walls

BLMT 8.0 — Maintain restrooms using proper cleansing and disinfection techniques

- 8.1. Demonstrate steps and procedures to clean restrooms and showers
- 8.2. Clean toilet bowls, urinals and wash basins
- 8.3. Clean and disinfect restroom and shower ceilings, walls and floors

BLMT 9.0 — Monitor general building maintenance, and provide additional cleaning and supply replenishment sources when needed

- 9.1. Dust and clean furnace filters
- 9.2. Dust and clean furniture and fixtures
- 9.3. Fill dispensers such as soap, towels or paper
- 9.4. Clean chalk boards
- 9.5. Identify tools and materials used in custodial services
- 9.6. Clean and disinfect kitchens, bathrooms, toilets and other public facilities
- 9.7. Properly collect and dispose of various forms of trash

BLMT 10.0 — Apply general maintenance/repairs to plumbing fixtures, i.e., disassemble sink P-trap, clean away an obstruction, reassemble/test for proper operation

- 10.1. Apply knowledge and experience to check a P-trap for clog
- 10.2. Apply knowledge and experience to clean a clogged P-trap
- 10.3. Demonstrate knowledge and experience to choose the correct valve cartridge or seat
- 10.4. Demonstrate steps and procedures to replace valve cartridge or seat

BLMT 11.0 — Apply general maintenance/repairs to electrical fixtures, i.e., disassemble receptacle and switch, install correct receptacle and switch, test for proper operation

- 11.1. Demonstrate knowledge and experience to choose the correct switch
- 11.2. Demonstrate knowledge and experience to choose the correct receptacle
- 11.3. Apply knowledge and experience to install the correct switch
- 11.4. Apply knowledge and experience to install the correct receptacle

COMMITTEE IDENTIFIED ACADEMIC SKILLS

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

Math Skills

- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Solve practical problems involving percentages
- Solve single variable algebraic expressions
- Solve multiple variable algebraic expressions
- Solve problems using proportions, formulas and functions

Science Skills

- Describe and recognize elements, compounds, mixtures, acids, bases and salts
- Describe and recognize solids, liquids and gases
- Describe characteristics of types of matter based on physical and chemical properties
- Use knowledge of physical properties (shape, density, solubility, odor, melting point, boiling point, color)
- Use knowledge of chemical properties (acidity, basicity, combustibility, reactivity)
- Describe and demonstrate simple compounds (formulas and the nature of bonding)
- Predict chemical changes to matter (types of reactions, reactants and products, and balanced equations)

Language Arts Skills

- Demonstrate comprehension of a variety of informational texts
- Use text structures to aid comprehension
- Demonstrate knowledge of appropriate reference materials
- Use print, electronic databases and online resources to access information in books and articles

CONNECTIONS TO NATIONAL STANDARDS

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

Math Standards

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

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: www.nctm.org.

Science Standards

- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands forces and motion

Source: McREL compendium of national science standards. To view and search the compendium, visit: www2.mcrel.org/compendium/browse.asp.

Language Arts Standards

- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- 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.
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.ncte.org/standards.