



BRICKLAYER

(revised 8-8-2005)

Purpose

To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of bricklaying

First, refer to General Regulations, page 7.

Clothing Requirement

Clothing that is safe and appropriate to the bricklaying trade and work environment should be worn, including hard hat, leather work shoes (leather canvas athletic shoes are not acceptable), and safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

Eligibility

The contest is open only to active secondary division SkillsUSA Virginia members enrolled in Trade and Industrial programs with entry-level job skills in the bricklaying trade as an occupational objective. The contestant must be classified under the provisions of Public Law 94-142 entitled "Education for Handicapped Children Act of 1975". Contestants must have an IEP (Individual Education Plan) on file in their home schools.

Equipment and Materials

1. Supplied by the technical committee:

- a. Tenders
- b. Hose
- c. Three 55-gallon water drums or the equivalent
- d. Mortar pans, boards, pails, wheelbarrows
- e. Hoes
- f. Square-nosed, short-handled shovels
- g. Sand
- h. Masonry mix or ready-mixed mortar
- i. Resin paper or suitable area covering
- j. All necessary information and furnishings for judges and technical committee

2. Supplied by the contestant:

- a. Trowel
- b. Two levels (24" and 48")
- c. One "S" Jointer
- d. Long jointer
- e. One brick hammer
- f. Two six-foot folding rules (one modular, one standard)
- g. One carrying bag
- h. One pencil
- i. One square

- j. One brush
- k. One brick chisel
- l. Line and line blocks
- m. Safety goggles
- n. Leather work shoes
- o. Hard hat
- p. One page personal resume' to be handed in at the beginning of the contest.

3. Scope of the Contest

- a. Contestants will construct a project using brick, according to project drawings, within an allotted period of time.
- b. Contestants will be rated on one project designed by the State SkillsUSA Skill Competitions Technical Committee based upon competencies selected from the following competency list:
- c. Contents will be required to remain until judging is completed, and each contestant will be required to tear down their project and assist with cleaning the contest area. Contestants may not leave the contest area until dismissed by the contest chair.

4. Basic Skills

- 1. Brick Masonry Techniques
 - a. Choose proper tools and material.
 - b. Perform work in a reasonable amount of time as determined by the instructor and/or industry standards.
 - c. Lay-up masonry products in an accurate and professional manner.
 - d. Load and unload material as directed.
 - e. Clean up work areas properly and thoroughly.
- 2. General Safety
 - a. Demonstrate appropriate safety precautions when performing all tasks.
 - b. Demonstrate awareness of potential hazards when performing all tasks.
 - c. Accept responsibility for the safety of other workers.
 - d. Keep work areas neat and organized.
 - e. Wear proper safety equipment and clothing.
 - f. Follow prescribed OSHA standards.
- 3. Hand Tools and Equipment
 - a. Cut masonry safely around others.
 - b. Place mortar cautiously in the mortar pan or on the mortar board.
 - c. Keep tools out of the paths of other people working on the job.
 - d. Handle tools properly.
- 4. Hand Tool Identification and Usage
 - a. Identify basic hand tools used in brick masonry.
 - b. Demonstrate an understanding of the specific uses of each hand tool.
 - c. Practice the safety rules for each hand tool.
 - d. Identify quality tools.
 - e. Store and care for hand tools.
- 5. Measuring Tools
 - a. Use and maintain a modular ruler and a spacing ruler.
 - b. Set and use a story pole.

6. Masonry Levels
 - a. Use a 24" and 48" level for plumbing and leveling.
 - b. Care for and maintain a level.

B. Materials and Methods

1. Brick Masonry Materials
 - a. Arrange masonry materials for efficient use.
 - b. Place mortar pans properly.
 - c. Temper or shake-up mortar with proper shovels.
2. Hod-carrying
 - a. Arrange masonry materials for efficient use.
 - b. Place mortar pans properly.
 - c. Temper or shake-up mortar with proper shovels.
3. Trowel Usage
 - a. Manipulate a trowel properly.
 - b. Cut and roll, and cut and cup mortar to load trowel properly.
 - c. Spread and furrow mortar properly.
4. Bonding Methods
 - a. Demonstrate knowledge of different types of bonding used in masonry construction.
 - b. Layout bond.
 - c. Determine coursing.
5. Tooling and Pointing Joints
 - a. Tool concave joints.
 - b. Tool rake, weather, V-jointer, grapevine, and struck joints.
 - c. Cut/ rough joints.
 - d. Tuck-point a wall.
 - e. Brush and touch-up wall.
6. Cleaning Brick
 - a. Follow correct procedures for keeping masonry work clean.
 - b. Follow correct procedures in cleaning brick.
 - c. Follow correct procedures for rubbing and tuck pointing concrete block and slag block.

C. Bricklaying

1. Brick Wall Construction
 - a. Lay brick at a reasonable rate per hour.
 - b. Attach a line block and line pins to a wall.
 - c. Set a trig.
 - d. Lay brick to a line while holding bond.
 - e. Throw a full head joint.
2. Brick Corner Construction
 - a. Lay out a wall in preparation for building a brick corner.

- b. Construct a rack- ac lead.
 - c. Construct an outside and inside corner lead.
3. Single Wythe Brick (loadbearing) Wall Construction
- a. Determine type of brick to be used.
 - b. Bond the wall
 - c. Scale each course.
 - d. Lay brick in mortar to scale.
 - e. Secure wall with ties at desired intervals.
 - f. Point and joint the wall.
4. Fireplace and Chimney Construction
- a. Identify various components of a fireplace.
 - b. Build a fireplace according to plans.
 - c. Identify various components of a chimney.
 - d. Build a one-flue chimney from given plans.

Contestants must present a one page personal resume' at the beginning of the contest.

Bricklayer Rating Sheet

ITEMS EVALUATED	POSSIBLE POINTS
ONE PAGE PERSONAL RESUME	10
Height	30
Level	30
Plumb	30
Neatness	15
Correct Design	30
Square and Range	20
Manipulation	15
Full and Uniform joints	25
Production	15
Safety	15
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SUBTOTAL	235
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TOTAL POINTS	