

# **SkillsUSA**

## **2015 Contest Projects**

### **Masonry**

Click the “Print this Section” button above to automatically print the specifications for this contest. Make sure your printer is turned on before pressing the button.

# 51st Annual



**Kentucky Exposition Center**

**Louisville, Kentucky  
JUNE 25, 2015**

***JUDGING CRITERIA***

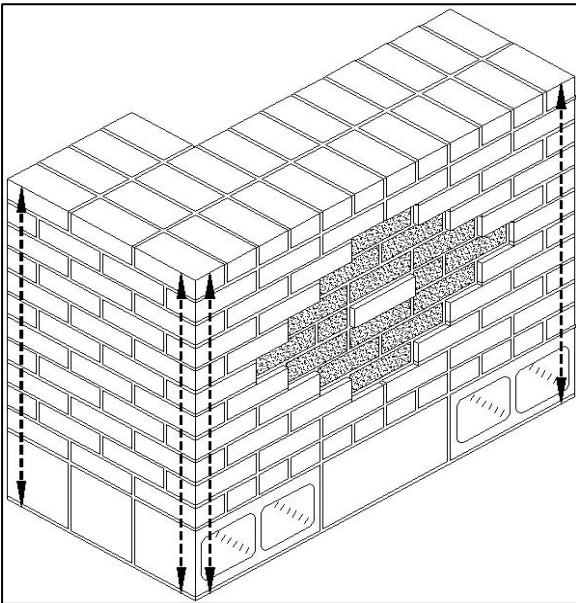
**ITEM 1 - PLUMB**  
**MAXIMUM POINTS = 125**

**Procedure**

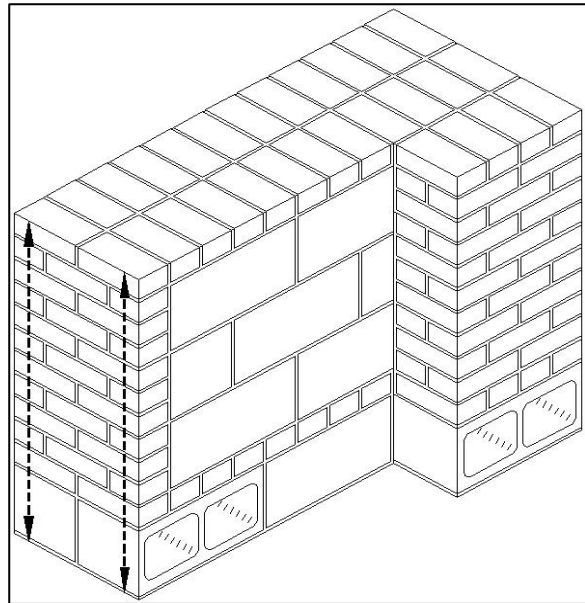
Refer to drawing below for the locations to check plumb. There are six locations total.

- A. Use a 4 foot level to find exact plumb at each location. Insert step gauge at the largest gap and deduct five points for each notch the gauge is inserted.
- B. Add notches for all locations and deduct from 125 to obtain score. If total is a negative amount, record zero. Record the score under the proper contestant number on score sheet.

**Front View**



**Rear View**

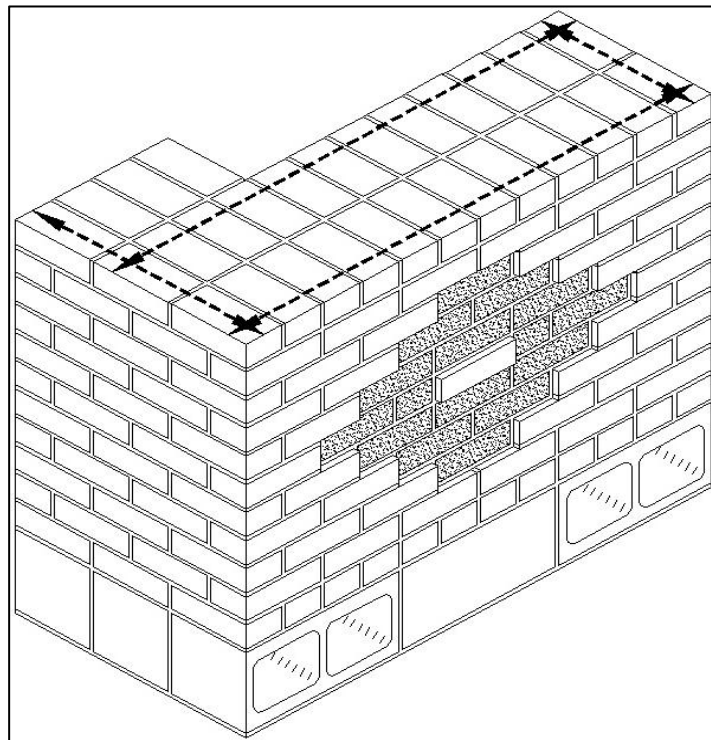


**Procedure**

Refer to drawing below for the locations to check level. There are 4 locations total.

- A. Use a 4 foot level to find exact level at each location. Insert step gauge at the largest gap and deduct five points for each notch the gauge is inserted.
- B. Add notches for all locations and deduct from 125 to obtain score. If total is a negative amount, record zero. Record the score under the proper contestant number on score sheet.

**Note:** If the project is not complete, the level points indicated for judging are not available. Therefore, this item cannot be judged and a score of zero is entered.



**ITEM 3 - SQUARE AND RANGE**  
**MAXIMUM POINTS = 125**

**Procedure**

Refer to drawing below for the locations to check square and range.

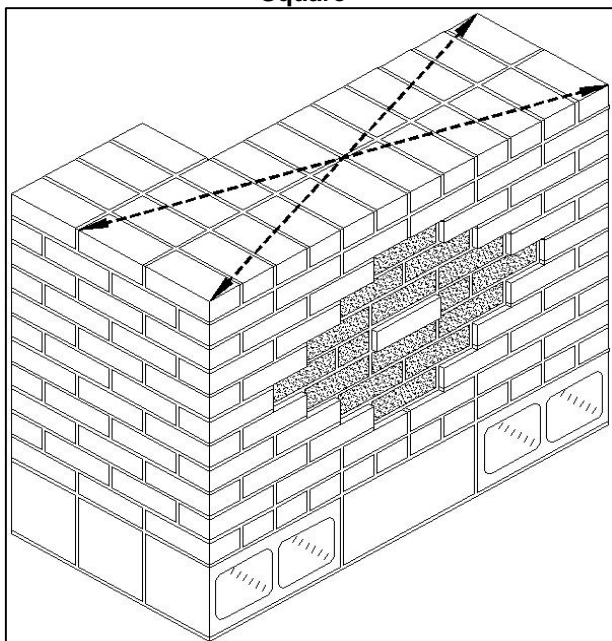
**A. Square:**

1. Measure outside dimensions on the diagonal as indicated. Square will be measured on the top of the project only.
2. Deduct five points for each 1/16" of difference in these measurements.

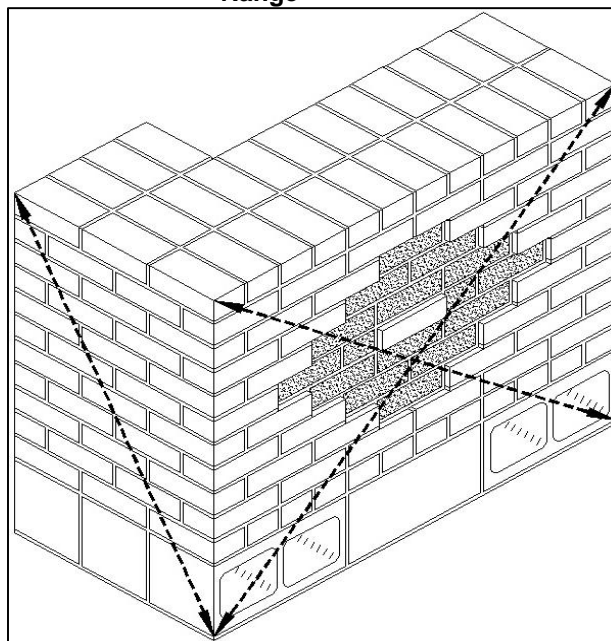
**B. Range:**

1. Use straightedge to check range (alignment) on the front of the project. Range will also be checked on the left side of the project as indicated below.
  2. Insert step gauge at the largest gap on each side, add up the total out of range number, and deduct five points for each notch the gauge is inserted.
- C. Add the number of points from square and range and deduct from 125. Record the score under proper contestant number on rating sheet. If total is a negative record zero.

**Square**



**Range**

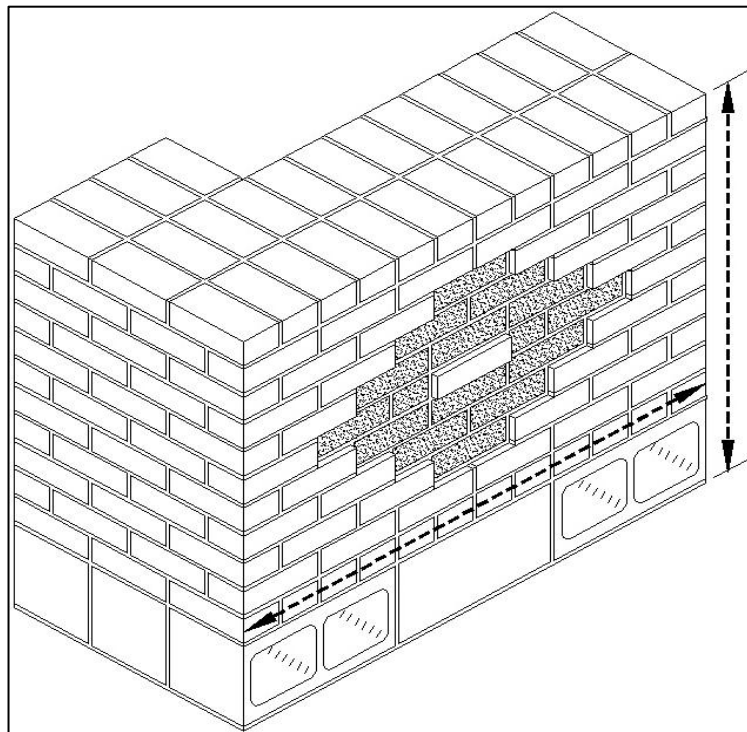


**ITEM 4 - MEASUREMENTS**  
**MAXIMUM POINTS = 125**

**Procedure**

Refer to the drawing below for the correct measurements.

- A. Horizontal measurements should be made on the face of the second course.  
Deduct five points for every 1/16" difference in horizontal measurement shown on drawing.
- B. Vertical measurement should be made from the floor at the point shown on the drawing below to the top of the finished wall. If the project is incomplete, deduct 50 points. If complete, deduct five points for every 1/16" difference in height measurement shown on the drawing.
- C. Add all deductions and subtract from 125 to obtain score. Record the score under the proper contestant number on the score sheet. If total is a negative record zero.





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**ITEM 5 - CORRECT DESIGN  
MAXIMUM POINTS = 125**

**Procedure**

Observe each project after contest is completed and compare with the working drawings on the last page of this criteria for conformity. The project must match the drawing exactly.

- A. Check first course all the way around the project to see if the layout is correct.  
Subtract 25 points if incorrect.
- B. Check the remainder of the project and determine if the drawings and specifications have been followed. Subtract 10 points for every deviation above the first course of masonry.
- C. Add items A and B to determine score. Record the score under the proper contestant number on the score sheet. If the total is a negative record zero.



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### ITEM 6 - TOOLING & NEATNESS MAXIMUM POINTS = 100

#### **Procedure**

All joints are to be struck and brushed as finished masonry. No oil or other additive may be rubbed on the face of the masonry to enhance its appearance nor may anything other than a brush (i.e. carpet, sponge) be used. All tooling and brushing must be completed before the contestant leaves the area.

Neatness will be judged during and after the construction. Safe disposal of unusable units, mortar use and waste, and finished appearance of the work will be judged.

**Note:** This is subjective judging. You may choose a particular contestant and the control or standard of excellence in the field of contestants and judge down from there. In addition, there should be a minimum of three judges for tooling and neatness, all providing independent scores. These scores will then be averaged by the head judge to determine the final score. Keep in mind, several contestants may have the same score.





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**ITEM 7 - FULL JOINTS  
MAXIMUM POINTS = 100**

**Procedure**

This item to be judged while contestants are working.

A. Observe and rate the following:

1. The extent to which head and bed joints are filled.
2. The uniformity of head and bed joints.

B. Award 0-100 points to determine score. Record the score under the proper contestant number on the score sheet.

**Judges' Tip:** Workmanship standards generally consider a head joint on brickwork to be full when it is at least 85% full and the void is in that half of the joint away from weather. A head joint on CMUs is considered full when it is at least 90% full and the void is in that half of the joint away from weather. All bed joints are considered full when at least 90% full and the void is in that half of the joint away from the weather.



## JUDGING CRITERIA JUNE 25, 2015

### ITEM 8 - PRODUCTION MAXIMUM POINTS = 100

#### Procedure

- A. A contestant will receive 100 points for a finished project. Record 100 under the appropriate contestant number on the score sheet.
- B. For all unfinished projects, do the following:
  1. Count the number of brick laid and divide that number in half. Half brick count the same as whole brick, giving a possible total of 170 for a complete project. For example, if there are 10 of the 11 courses completed, then the number for the brick laid would be  $142/2$  (there are 28 brick in the top course) or 71.
  2. Count the number of CMUs. Half CMUs count the same as whole CMUs. Do not divide this number by two. For example, the completed project has 10-8x8x16 units, 5-6x8x16 units, 5-4x8x16 units, and 4 halves, giving a total of 24 block.
  3. Add one and two. Look up the sum in the chart below and award the corresponding score (i.e. the examples in 1 and 2 would give a total of 95, so a score of 90 would be recorded). Record the score for the appropriate contestant number on the score sheet.

Sum	Score
85 - 95	90
75 - 85	80
65 - 75	70
55 - 65	60
45 - 55	50
35 - 45	40
<35	30

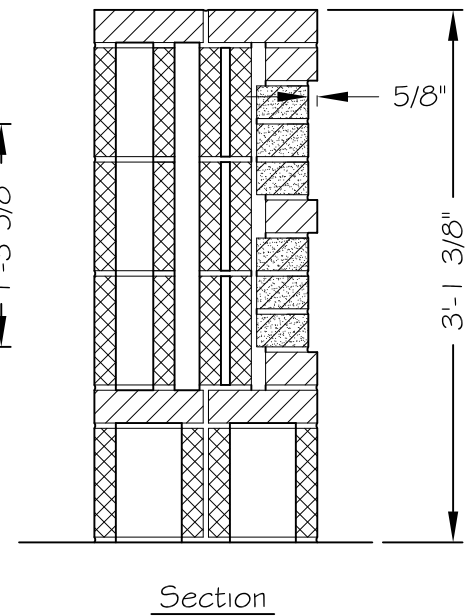
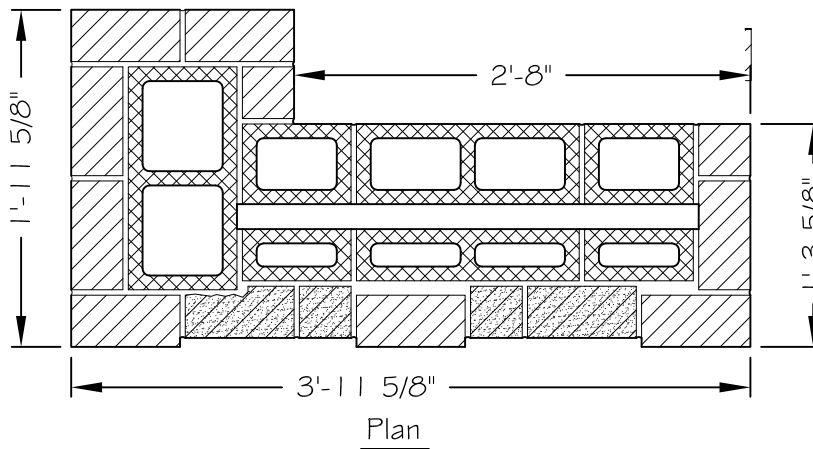


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**ITEM 9 - WRITTEN TEST  
MAXIMUM POINTS = 100**

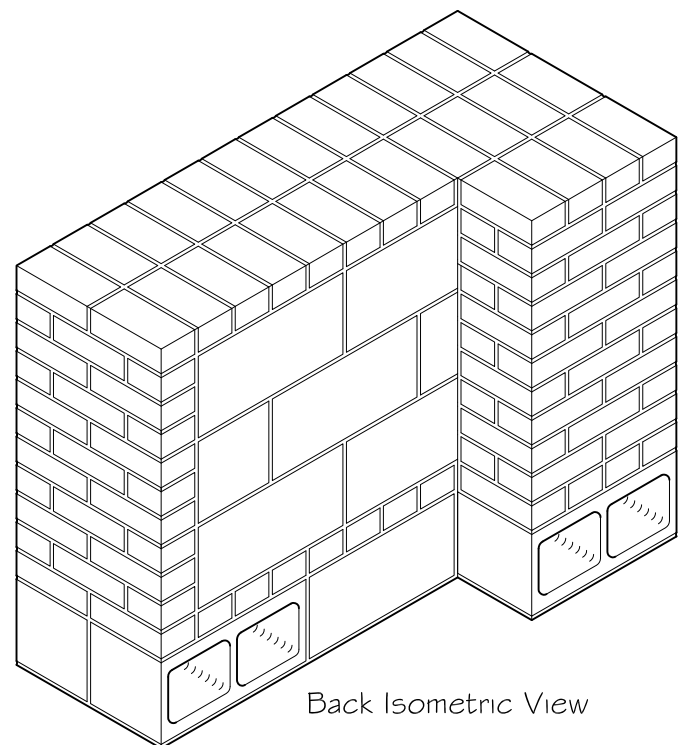
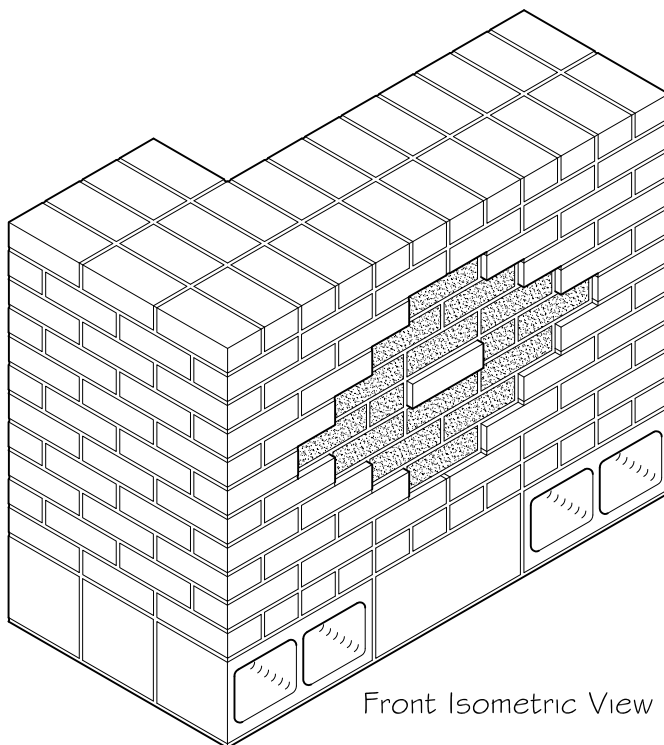
**Procedure**

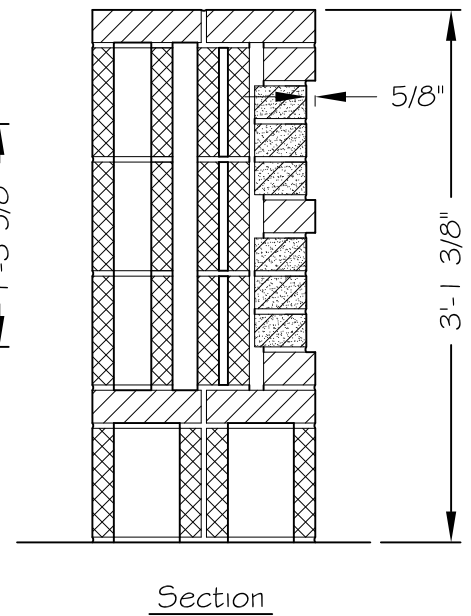
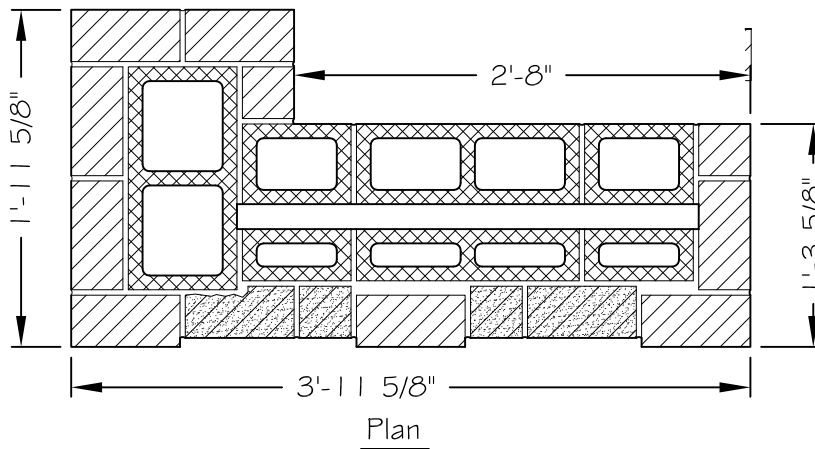
Results from the written exam.



Materials:

- 10 - 8" CMU
- 5 - 6" CMU
- 5 - 4" CMU
- 2 - Half 6" CMU
- 2 - Half 4" CMU
- 121 - Modular Brick - Type A
- 15 - Modular Brick - Type B
- 28 - Uncored Modular Brick - Type A





Materials:

- 10 - 8" CMU
- 5 - 6" CMU
- 5 - 4" CMU
- 2 - Half 6" CMU
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- 121 - Modular Brick - Type A
- 15 - Modular Brick - Type B
- 28 - Uncored Modular Brick - Type A

