

Building Construction



District 8 Competition

Monday, January 20, 2020

Keystone+Mountain+Lakes
Carpenters Training Center

652 Ridge Road

Pittsburgh PA. 15205

(412) 262-1830



Location Chair - John Brown
412-847-1944 or john.brown@beattietech.com



Building Construction Competition Overview

- Cell Phones or wearable electronics are not permitted at any time even if powered off.
- There are no official clothing requirements at the District level.
- **All competitors must wear trade appropriate clothing and safety equipment that follows ALL trade safety rules.**
- Resumes are not needed at the District level.
- If there is a question about the contest, please contact the SkillsUSA site coordinator.

Carpentry:

Contestants must provide all hand and power tools including but not limited to:

- Personal Hand Tools (Hammer, Tape, Chalk Line, Square, etc.)
- 2' and 4' Levels
- Portable Circular Saw
- Cordless Drill
- Framing Square
- Hand Saw
- Reciprocating Saw (optional)
- Drywall Mud Pan and Knives
- Drywall Saws

Plumbing:

Contestants must provide:

- Tubing Cutter
- PVC Hand Saw, or Hack Saw
- Flux
- Solder
- Cleaning Tools

Electrical:

Contestants must provide all hand tools and power tools including:

- Wire Strippers
- Linesmen Pliers
- Needle Nose Pliers
- Screwdrivers
- Power Drill & Bits

***Students may bring more tools if they desire. Your school and The KML Carpenters' Training Center are not responsible for lost, stolen, or damaged tools.**



Building Construction Contest Description

Carpentry:

Construct walls on floor (provided by host school) as per floor plan.

Note: All walls are 16" O.C.

Cover outside of walls with 1/2" Drywall.

Note: Tape and first coat all seams

Install corner bead

Plumbing:

Rough in laundry supply box according to specifications on the drawing.

Note: Cap ends of copper lines for testing

DO NOT Knock out drain in the laundry

DO NOT Glue plastic fittings

Electrical:

Rough in and attach fixtures as per drawing.

3-way switches

One light fixture

One duplex receptacle

Note: Contest blueprints will NOT be given out before the day of competition. Please prepare based off the State Technical Standards. All work must meet standard practices and Codes.

Building Construction

Material List

(Provided by the KML Carpenters' Training Center)

- 9 2x4x8'
- 2 4'x8'x1/2" Drywall
- 1 8' Corner bead
- 1 Joint compound
- 1 Drywall tape
- 1 3 lbs. of 1-1/4" drywall screws
- 2 1/2" Female T Headed fitting or Washer box
- 1 1/2"x10' Copper pipe
- 3 1/2" 90-degree copper elbows
- 1 4 in 1 fitting tool
- 1 2"x10' ABS pipe
- 1 2" P-trap
- 1 4" Round light box for light
- 3 Single work boxes for receptacle and switches
- 1 10' pc. Of 12-3 wire
- 1 15' pc. Of 12-2 wire
- 1 Light fixture porcelain
- 1 Receptacle
- 2 3-way switches
- 1 Teflon tape
- 1 3 lbs. of 16d common nails
- 1 Small box of wire staples
- 1 Small box of wire nuts
- Propane Torch

Building Construction

Items Evaluated	Possible Points
Carpentry	
Wall plates	10
Wall layout	10
Wall orientation	10
Stud length	10
Nailing pattern	10
Walls square	10
Sheathing correct	10
Studs crowned	10
Corner detail	10
Safety	10
Total	100
Electrical	
Box location	20
Rough wiring	20
Fixture install	20
Fixture operation	20
Code followed	10
Safety	10
Total	100
Plumbing	
Fixture location	10
Drain installation	10
Water lines	20
Holes in studs	10
Solder joints	10
Plastic joints	10
System check	20
Safety	10
Total	100
Drywall	
Drywall install	25
Screws depth	15
Screw location	15
Corner bead	15
Tape of joints	10
First coat of joints	10
Safety	10
Total	100
Total Score	400

Building Construction

Items Evaluated	Possible Points	Teams						
		1	2	3	4	5	6	7
Carpentry								
Wall plates	10							
Wall layout	10							
Wall orientation	10							
Stud length	10							
Nailing pattern	10							
Walls square	10							
Sheathing correct	10							
Studs crowned	10							
Corner detail	10							
Safety	10							
Total	100							
Electrical								
Box location	20							
Rough wiring	20							
Fixture install	20							
Fixture operation	20							
Code followed	10							
Safety	10							
Total	100							
Plumbing								
Fixture location	10							
Drain installation	10							
Water lines	20							
Holes in studs	10							
Solder joints	10							
Plastic joints	10							
System check	20							
Safety	10							
Total	100							
Drywall								
Drywall install	25							
Screws depth	15							
Screw location	15							
Corner bead	15							
Tape of joints	10							
First coat of joints	10							
Safety	10							
Total	100							
Total Score	400							