

South Carolina Skills USA

State Residential Electrical Competition

Name of Event: Electrical Construction Wiring

Date of Event: March 27, 2020

Location: CarolinaPower Office

Address: 2424 Dry Pocket Road

Greer SC, 29650 **This location is 10-15 mins from the TD Convention Center**

Contest Chair Contact Information

Name: Dan Enfinger

Company: Huxtable Electric

Phone number: 803-394-4589

Email address: dan@huxtableelectric.com

Note: Each school may have 4 contestants to compete.

All competition materials, i.e. wire devices, tools, etc., must be supplied by the competitor and his/her school.

Thursday March 26 2020 Competition Testing

2:00-5:00 Testing

**This year because the competition will be held off-site students will need to test on Thursday at the TD Center on Thursday prior to the wire competition on Friday. Tests will be starting at 2:00 P.M. This is a similar format to the national competition as well so it should give your students experience with this format. This new location will also give students experience at an electrical company's operational headquarter and we will be competing in their pre-fabrication warehouse so they will all be exposed to some of the tools/techniques used in modern electrical construction. **

Friday, March 27 2020 State wiring Championships

7:00A.M- 9.00A.M. Registration

8:30A.M. Opening Ceremony

10:00A.M.-11:45P.M. Hands on Project

11:45A.M.-12:05P.M. Lunch (It is the responsibility of the instructor to bring lunch to their student(s))

12:05P.M.-2:00P.M. Hands on Project

12:15P.M.-12:40P.M. Meeting with all instructors to discuss changes/improvements to the competition

2:00P.M. Championship concludes

2:00P.M.-3:00P.M. Judging and tallying of scores

3:00P.M.-4:00P.M. Breakdown and Clean Up

Saturday March 28, 2020, Awards Ceremony

***CHANGES TO THIS SCHEDULE ARE POSSIBLE. IF ANY CHANGES ARE MADE YOU WILL BE NOTIFIED BY MARCH 15th, 2020

State Electrical Competition Materials List

<u>Amount</u>	<u>Description</u>
1. 1	GFCI Duplex Grounded Receptacles
2. 2	3 Way Grounded Switches
3. 4	Single Pole Switches
4. 3	Plastic Keyless Light Receptacles
5. 3	Duplex Grounded Receptacles
6. 2	4 way grounded switches

- 7. 1 Box Wire Staples
- 8. 1 Box Ground Pigtail Wire Nuts/Crimp Bonding Grounds
- 9. 40 Red Wire Nuts
- 10. 20 Yellow Wire Nuts
- 11. 3 40 watt light bulbs
- 12. 240 volt receptacle, example a dryer receptacle (flush mount)
- 13. 3 to 4 foot pigtail (SO) cord with 120v 3 prong male plug on one end, this will be used to test the project.

NOTE: Conduit will be provided for the competition

Boxes for State Competition

- 1. 3 Two Gang Nail on Boxes (Plastic)
- 2. 8 One Gang Nail on Boxes (Plastic)
- 3. 3 Round Nail on Ceiling Boxes (Plastic)
- 4. 5 ½" KO 4x4 square metal boxes

Conduit

- 1. 10 ½" one hole straps with ¾" #10 sheet metal screws
- 2. 10 ½" EMT connectors
- 3. 8 ½" Romex connectors

Wire

- 15 feet- 10/3 with ground
- 80 feet 14/2 with ground

25 feet 14/3 with ground

Instructors will be given a copy of the project at the conclusion of the competition for their records.

*** Resume's are required this year. There is a resume template in the downloads found at <https://www.scskillsusa.org/slsc>.**

Equipment

1. Standard Electricians Tool Box or Tool Pouch & Tools (i.e. Lineman Pliers, Wire Strippers, Hammer, Drill, Screwdrivers, Tape Measure, etc.)
2. Digital Multimeter (Optional)
3. ½" EMT Bender
4. Hack Saw

Dress

1. ALL contestants will wear khaki pants and khaki shirt with SkillsUSA logo on shirt pocket.
2. Shirt will be tucked in!
3. NO sagging of the pants!
4. No tennis shoes!
5. Work Boots or Safety Shoes!
6. Hard Hats!
7. Safety Glasses!
8. NO School Logos or ANY Identifying school names allowed to be worn by competitors!
9. Sponsor Logos may be worn on shirts and Hard hats.

NOTE: POINTS WILL BE DEDUCTED IF CONTESTANT DOES NOT HAVE KHAKI SHIRT AND PANTS.

Written Test Outline

- General Construction Industry Safety Knowledge (5) Questions
- General Electrical Safety Knowledge (8) Questions
- Residential NEC Knowledge (5) Questions
- Residential Wiring Knowledge (10) Questions
- Commercial Wiring Knowledge (10) Questions
- Industrial Wiring Knowledge (5) Questions
- Mathematical Calculations (5) Questions
- Electrical Theory/OHM's Law (2) Questions
- Total (50) Questions

** Instructors will be given a copy of the written test at the conclusion of the competition for their records.**

Competition Supplemental Information

- **It is the responsibility of all instructors to bring lunch for their student(s)**
- **It is the responsibility of all contestants to breakdown and clean up their wiring projects. Any contestant in violation will have 50 Points deducted from their overall score.**