

SkillsUSA

2014 Contest Projects

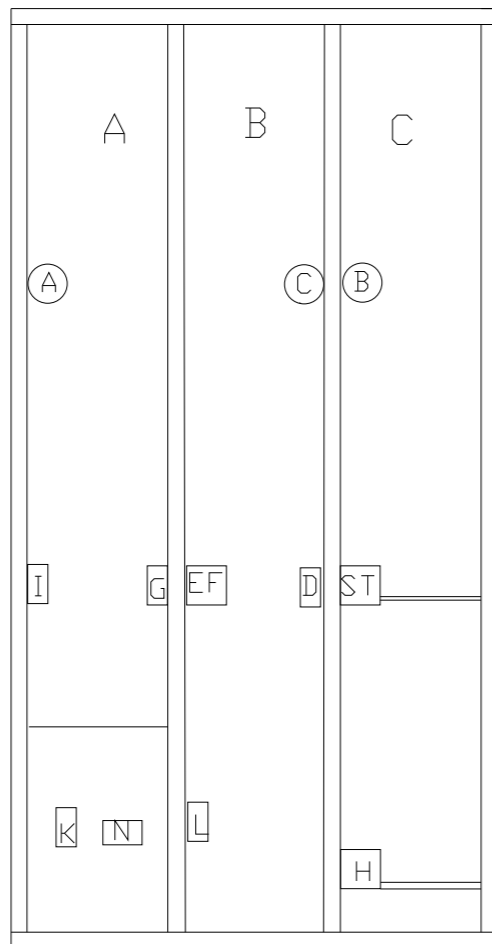
Electrical Construction Wiring

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.

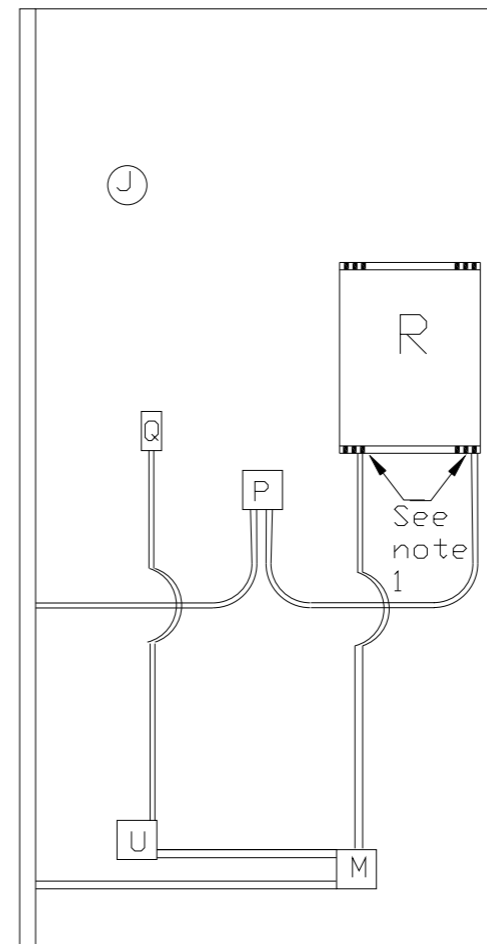
2014 SkillsUSA NLSC
National Championship
Electrical Construction Wiring
Drawing is NOT to Scale

Right Side

Studs



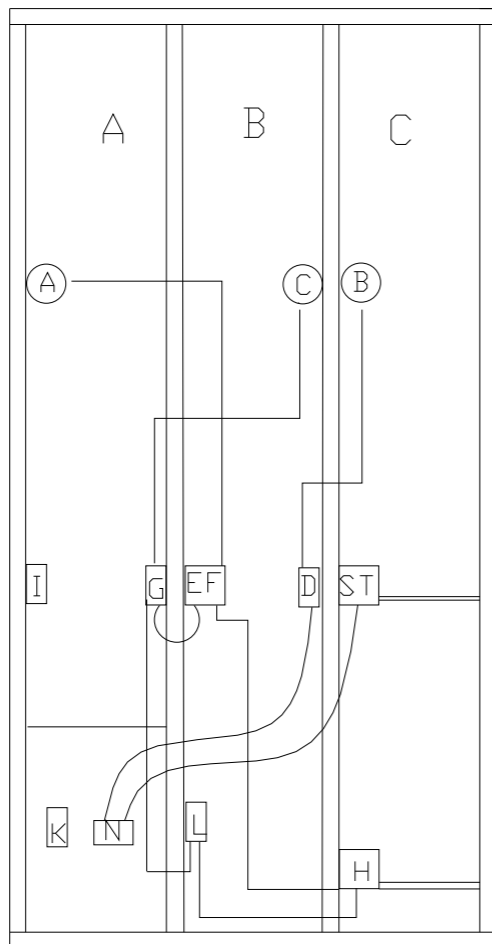
Plywood



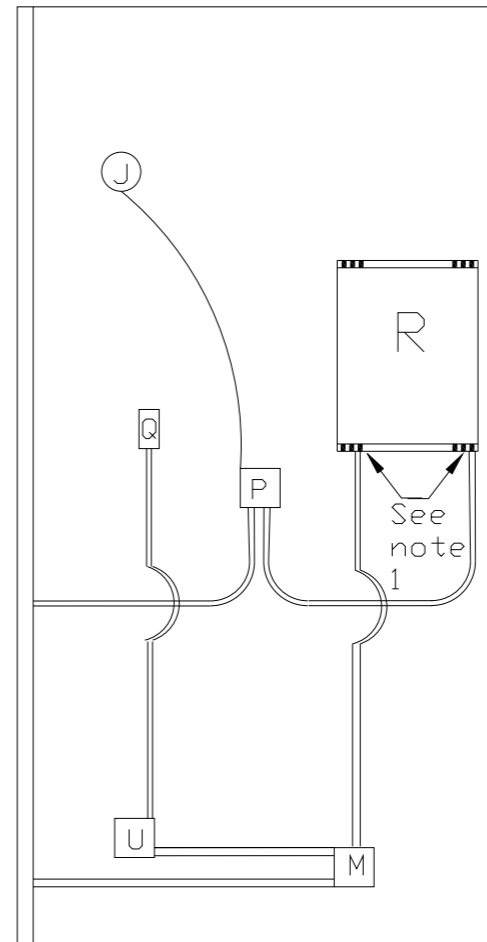
2014 SkillsUSA NLSC
National Championship
Electrical Construction Wiring
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Right Side

Studs



Plywood



2014 SkillsUSA NLSC

Electrical Construction Wiring

Right Side

LETTER	DEVICE TYPE	BOX DESCRIPTION	HEIGHT
A	Keyless Lamp Holder	4" Round Plastic Nail Up	67" AFF to Center
B	Keyless Lamp Holder	4" Round Plastic Nail Up	60" AFF to Top
C	Keyless Lamp Holder	4" Round Plastic with Bar Hanger	Note 2
D	Single Pole Switch	Plastic 1-Gang Box	44" AFF to Top
E	Single Pole Switch	Plastic 2-Gang Box	46" AFF to Top
F	3-Way Switch	Plastic 2-Gang Box	46" AFF to Top
G	3-Way Switch	Plastic 1-Gang Box	49" AFF to Top
H	Junction Box	4" x 2 1/8" with Side Mounting Brackets Box	12" AFF to Bottom
I	Telephone Outlet	1-Gang Low Voltage Bracket	Note 4 & 19
J	Keyless Lamp Holder	4" Metal Octagon Box	Note 5 & 25
K	Telephone Outlet	1-Gang Retrofit Low Voltage Bracket	Note 6 & 19
L	GFCI Receptacle	Plastic 1-Gang Box	Note 7
M	Junction Box	4" x 2 1/8" Box	Note 14
N	Duplex Receptacle	1-Gang Plastic Old Work Box	Note 15 & 35
P	3-Way Switch	4" x 1 1/2" Box with 1-Gang Device Ring	Note 17
Q	Single Pole Switch	4" x 1 1/2" Box with 1-Gang Device Ring	Note 18 & 31
R	Main Panel	Main Panel	Note 26
S	3-Way Switch	4" x 2 1/8" Side Brackets & 2-Gang Device Ring	33" to Bottom
T	Single Pole Switch	4" x 2 1/8" Side Brackets & 2-Gang Device Ring	33" to Bottom
U	Duplex Receptacle	4" x 1 1/2" Box with 1-Gang Device Ring	Note 27 & 31

1. Use K.O.'s closest to panel edge.
2. Box "C" 60" AFF top and centered between Studs
3. All Saddles shall be 3-point Saddles with 1/4" to 1/2" Clearance.
4. Box "I" 42" AFF bottom and use "blue" pair as primary.
5. Box "J" 66" AFF top and 39" to center from right plywood edge
6. Box "K" 6" AFF bottom center between studs and horizontal mounted.
7. Box "L" 16" AFF bottom "load" side feed Box "G".
8. All wire to be R/X unless otherwise noted.
9. All Circuits in the same conduit shall share a common grounding conductor
10. Fittings are not of grounding type
11. Use box offsets for all pipe terminations where possible
12. Ground all metal boxes
13. Use Low voltage staples for telephone wire

14. Box "M" 12" AFF bottom a
15. Box "N" 12" AFF bottom c
16. Write your Contestant Nun
17. Box "P" 45" AFF bottom a
18. Box "Q" 55" AFF top and i
19. Telephone Jacks to be inte
20. Panel is a Main Panel
21. Do Not stab ANY Devices
22. Do Not Mount ANY device
23. All heights to be measurec
24. Any measurements on ply
25. Box "J" shall be switched f
26. Box "R" 51" AFF bottom a

Contestant Number: _____

LOCATION	BOX MOUNTING	CIRCUIT
Stud Wall A	Nail Up	4
Stud Wall C	Nail Up	2
Stud Wall B	Nail Up	3
Stud Wall B	Nail Up	2
Stud Wall B	Nail Up	4
Stud Wall B	Nail Up	3
Stud Wall A	Nail Up	3
Stud Wall C	Side Bracket w/2-screws	NA
Stud Wall A	Nail Up	NA
Plywood	2 Screws	2
Stud Wall A	Cut-In	NA
Stud Wall B	Nail Up	3
Plywood	2 Screws	NA
Stud Wall A	Cut-In	2
Plywood	2 Screws	2
Plywood	2 Screws	1
Plywood	4 Screws	NA
Stud Wall C	2 Screws	2
Stud Wall C	2 Screws	2
Plywood	2 screws	1

CABLE LIST
RX - Nonmetallic Sheeted Cable
UF-Underground Feeder and Branch Circuit Cable
MC - Metal Clad Cable

and 11 1/8" from right edge of box and plywood.
center between studs and Vertical mounted.
number on all paper work on the line provided
and 23" from right edge of box and plywood.
8" from left edge of box and Stud.
reconnected with Blue Pairs as Primary Line

is to boxes
1/2" off of finished floor.
plywood to be off edge of plywood.
from Device "P" and "S".
and 3" off right edge of plywood.

27. Box "U" 16" AFF bottom and 8" from left edge of box and stud
28. Do NOT Drill holes in studs with out asking first.
29. Use Orange Pair as the secondary line on the phone jack
30. Use Romex staples for Romex only
31. Device "U" shall be completely switched from Device "Q".
32. Install a #14/3 w/grnd RX from Box "G" to Box "EF"
33. Install a #14/3 w/grnd RX from Box "N" to Box "ST"
34. Install a #14/2 w/grnd MC from Box "J" to Box "P".
35. Device "N" "top" switched from Device "T" and bottom always "hot"

2014 SkillsUSA NLSC

Electrical Construction Wiring

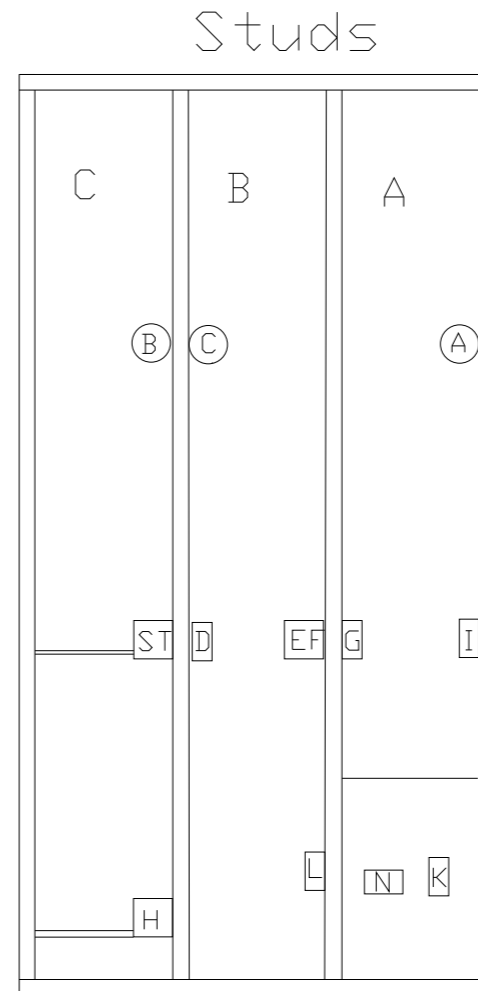
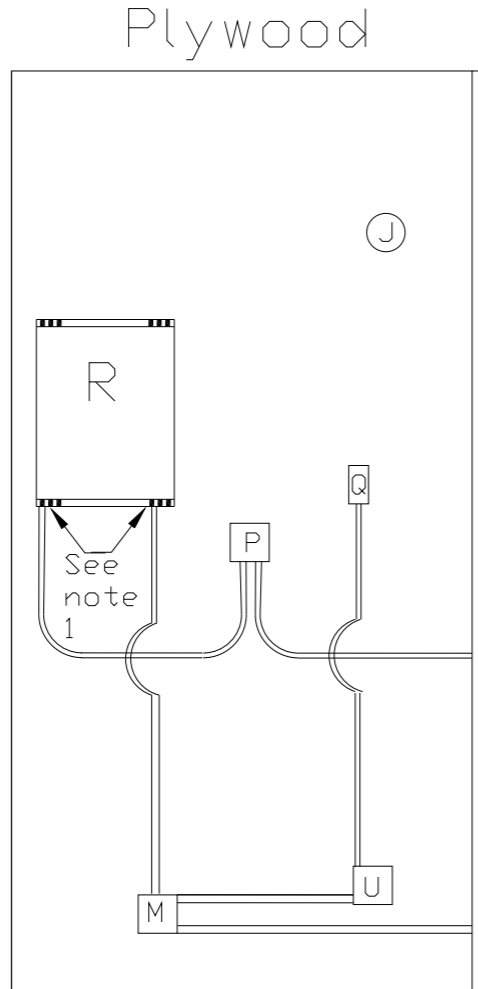
Contestant Number: _____

Right Side

LETTER	DEVICE TYPE	BOX DESCRIPTION	HEIGHT	LOCATION	BOX MOUNTING	CIRCUIT
A	Keyless Lamp Holder	4" Round Plastic Nail Up	67" AFF to Center	Stud Wall A	Nail Up	4
B	Keyless Lamp Holder	4" Round Plastic Nail Up	60" AFF to Top	Stud Wall C	Nail Up	2
C	Keyless Lamp Holder	4" Round Plastic with Bar Hanger	Note 2	Stud Wall B	Nail Up	3
D	Single Pole Switch	Plastic 1-Gang Box	44" AFF to Top	Stud Wall B	Nail Up	2
E	Single Pole Switch	Plastic 2-Gang Box	46" AFF to Top	Stud Wall B	Nail Up	4
F	3-Way Switch	Plastic 2-Gang Box	46" AFF to Top	Stud Wall B	Nail Up	3
G	3-Way Switch	Plastic 1-Gang Box	49" AFF to Top	Stud Wall A	Nail Up	3
H	Junction Box	4" x 2 1/8" with Side Mounting Brackets Box	12" AFF to Bottom	Stud Wall C	Side Bracket w/2-screws	NA
I	Telephone Outlet	1-Gang Low Voltage Bracket	Note 4 & 19	Stud Wall A	Nail Up	NA
J	Keyless Lamp Holder	4" Metal Octagon Box	Note 5 & 25	Plywood	2 Screws	2
K	Telephone Outlet	1-Gang Retrofit Low Voltage Bracket	Note 6 & 19	Stud Wall A	Cut-In	NA
L	GFCI Receptacle	Plastic 1-Gang Box	Note 7	Stud Wall B	Nail Up	3
M	Junction Box	4" x 2 1/8" Box	Note 14	Plywood	2 Screws	NA
N	Duplex Receptacle	1-Gang Plastic Old Work Box	Note 15 & 35	Stud Wall A	Cut-In	2
P	3-Way Switch	4" x 1 1/2" Box with 1-Gang Device Ring	Note 17	Plywood	2 Screws	2
Q	Single Pole Switch	4" x 1 1/2" Box with 1-Gang Device Ring	Note 18 & 31	Plywood	2 Screws	1
R	Main Panel	Main Panel	Note 26	Plywood	4 Screws	NA
S	3-Way Switch	4" x 2 1/8" Side Brackets & 2-Gang Device Ring	33" to Bottom	Stud Wall C	2 Screws	2
T	Single Pole Switch	4" x 2 1/8" Side Brackets & 2-Gang Device Ring	33" to Bottom	Stud Wall C	2 Screws	2
U	Duplex Receptacle	4" x 1 1/2" Box with 1-Gang Device Ring	Note 27 & 31	Plywood	2 screws	1

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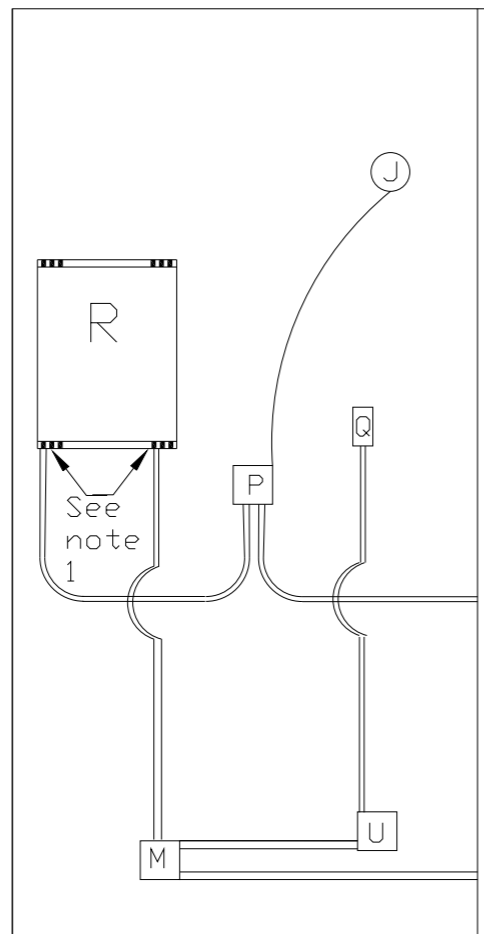
Left Side



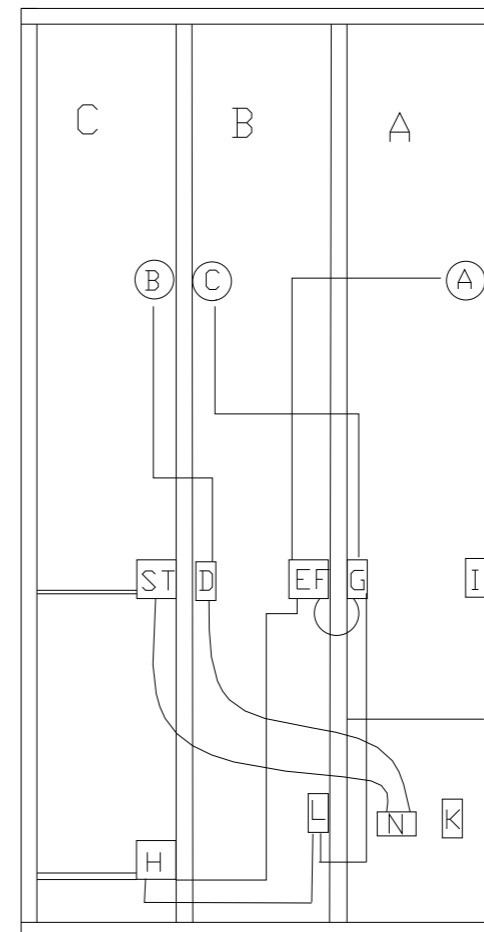
2014 SkillsUSA NLSC
National Championship
Electrical Construction Wiring
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Left Side

Plywood



Studs



2014 SkillsUSA NLSC

Electrical Construction Wiring

Left Side

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24. Any measurements on ply
25. Box "J" shall be switched f
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Stud Wall B	Nail Up	3
Stud Wall B	Nail Up	2
Stud Wall B	Nail Up	4
Stud Wall B	Nail Up	3
Stud Wall A	Nail Up	3
Stud Wall C	Side Bracket w/2-screws	NA
Stud Wall A	Nail Up	NA
Plywood	2 Screws	2
Stud Wall A	Cut-In	NA
Stud Wall B	Nail Up	3
Plywood	2 Screws	NA
Stud Wall A	Cut-In	2
Plywood	2 Screws	2
Plywood	2 Screws	1
Plywood	4 Screws	NA
Stud Wall C	2 Screws	2
Stud Wall C	2 Screws	2
Plywood	2 screws	1

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Electrical Construction Wiring

Contestant Number: _____

Left Side

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L	GFCI Receptacle	Plastic 1-Gang Box	Note 7	Stud Wall B	Nail Up	3
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