## IT 315

## Hands On #2

### Clarence V Kimbrell Jr

1. Why is stranded rather than solid cable used for patch cables?

One of the biggest reasons why stranded is used instead of solid cables for patching is because of its surface damage resistance. This means that the coating of the cable is more protected than a solid one. This allows for the accidental scratch to not ruin the entire thing. Secondly, the flexibility of stranded cables is superior to solid ones. This opens the door to more cable configurations and setups.

2. Why is it critical not to score the jacket too deeply when stripping the cable?

This is important because we are just adding a stress mark so we can peel the jacket where the stress mark was made. If we score too deeply when stripping the cable, it will cut the wires on the inside and will not function at its best. There is a string that is in most cables that allow you to expose more of the wiring so scoring too deeply will ruin this too.

3. Why is it recommended to expose more than .5 inches of wire pairs?

It is recommended to expose more than .5 inches of the wire pairs to be certain you know which to pair up when realigning them.

4. Why is it critical to use the proper pin colors in order?

It is critical because it allows for the speed the cable is meant for. If you do not follow the same color pattern it will still work but not at its fullest extent and will be slow. So, if you want the maximum speed of information through the patching cable it is important to follow the colors.

5. Why is it critical to cut the wire pairs off .5 inches or less before inserting into the connector?

This allows the user to have the jacket and still be able to fit into the connector for a later step in the process. It will be crimped in the connector so the cable does not move and disturb the connection.

6. Why is it critical to make sure that all of the wires are pushed to the end of the connector?

In the connector, this is a tiny divider that splits the wires inside the cable but this can only be reached if the wires are pushed to the end. Secondly, if they are not pushed to the back, the wiring will not reach the conductors to allow things to flow throw them.

7. Why is it recommended to double check the wire order and make sure the wires are to the end before crimping?

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It is recommended because it needs to reach the conductors at the end to provide the best connection. Once the wire is crimped it will be difficult to undo.

8. How is a continuity tester different from a certification tester?

A continuity tester is a tool that checks to see if the flow of the cable is complete and allows information to pass. Then a certification tester is another tool that checks the cables but this time around. It checks if the cables and wiring meet the standards in place. So, if the cabling does not meet the standard it will be told to be redone until it meets the standards. Since most buildings are connected there needs to be standards put in place that allow them to communicate with each other if they are not using the same equipment.

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