

Basic Copper Training

Introduction: (15 Mins)

- Make sure everyone in the room knows each other.
- Tool check
 - We need to send a list of tools needed
- List of tools needed
 - Snips
 - Punch tool w/ 110/66
 - Sharpie
 - 10 in 1 screw driver
 - Level
 - Ringer (insulation remover)
 - Note pad
 - Ink pen and pencil

Cable Type Review: (15 Mins)

- Cat5e
- Cat6
- Cat6A
- Cat6AS/UTP
 - Talk about the difference in each type of cable
 - The difference in the twist
 - The difference in the performance
 - The difference in the wire gauge

Cable Rough In: (60 Mins)

- Cable readings
 - Learn what all the markers on the cables mean
- Proper cable head
 - Tape
 - Follow String
 - Stager/Angle cut
- Labeling of cable
 - Labeling up and down on the cable
 - Underline (2) times
 - Min of (2) labels per cable
 - Spacing of labels
 - Labeling of the boxes
 - Keeping track of the footages on the boxes
 - Label that goes on the cable corresponds with the label on the box
- Cable Pulling
 - Follow String management
 - Clean up of follow string
 - Back length string
 - Service loops
 - How much cable comes out of each outlet
 - Pulling of cable
 - Common pulling terms/ hand signals
 - Ladder safety

Faceplates: (10 mins)

- Review all parts in the faceplate
- Understanding the faceplate/jack orientation
 - If confused explain different methods to remember (Different ways to mark out how the jacks need to be laid in the faceplate (Mark on box))
- Explain how to lace cable into outlets behind the faceplate
- Leveling of faceplate
- How to install desi or windows
- How to install jacks into plates
- Faceplate labeling (just an introduction)

Cable Termination: (60 Mins)

- Prepping of the cables
 - How to take of the jacket
 - How to re label the cable
 - Removal of strength membrane
- 568 A and B Review
 - Show them on the jack the (2) styles of termination standards
 - Explain what change is made between (A) and (B)
 - Pop quiz what color changes between (A) and (B)
- Termination of a Jack
 - Show different jack layouts
 - Feed through
 - 110 style
 - Show proper way to lace in cables
 - Checking if (A) or (B)
 - Maintain twist
 - No Humps
 - Keeping the jacket as close to the jack as possible
 - Make sure Colors are laced in correct
 - Termination of the jack
 - Check the package to make sure the correct. lbs. are being used on the punch tool
 - Make sure everyone understands how to use the punch tool
 - Make sure everyone has the correct blade to terminate
 - Show how to terminate
 - Show how not to terminate
 - Knee
 - Drywall
 - Hand
 - Furniture
 - Ceiling
 - Let them start terminating Both (A) and (B)
 - Inspect the terminations

Jack off: (15 min)

- Quad outlet race
 - Jacks
 - Faceplate
 - Snapping jacks into faceplate
 - Mounting of faceplate

Team Terminate and Test: (15 min)

- Split into teams
 - Each team terminates one side of the cable
 - Each team will have the cable tested
- Small introduction to the Fluke
 - Show them what the different fails look like
 - Show them what good test results look like
 - Explain some of the terms like (NEXT) and so on.

Material needed:

- Cable
 - Cat5e (scrap boxes)
 - Cat6 (scrap boxes)
 - Cat6A (scrap boxes)
 - Cat6AS/UTP (scrap reels if we have)
- Jacks
 - Cat6 jacks (depends on how many people)
 - Different manufactures
- String
- Tape
- Faceplates
 - (4) port and the same manufacture as the jacks
- Training room and warehouse cleared out for training
- DTX with Perm and channel