# Program Information

## Lesson:

### *Premises Cabling Installation*

## Training:

## Premises Cabling

## Time frame:

### 60 minutes

# Instruction Section

## Learning Objectives:

# Describe the main roles of a premises cabling contractor.

# Explain what are the best practices involved in premises cabling installation.

# Communicate proper safety protocols for cabling installation.

## Assessment Tools/Methods:

# Use group discussions as opportunities to assess understanding and application of cable installation concepts.

## Learner Prior Knowledge:

## Prior to class, participants will need to read:

## Reference Guide: Installing Premises Cabling (<https://www.thefoa.org/tech/ref/premises/PremInstall.html>)

## Instructional Activities:

# Begin by asking participants to briefly share challenges they face or anticipate in telecom room cable management.

# Have a brief discussion about the responsibilities of contractors and technicians as cabling is installed in a facility.

# Activity 1: Preparing For Installation:

1. Ask participants to list the roles of a premises cabling contractor through the six stages of installation (design, installation, testing, troubleshooting, documentation, and restoration).

# Explain the importance of training and certification for installation technicians, citing examples from reputable certification programs like The FOA.

# Review electrical and fire safety discussed in self-guided reading.

# Engage participants in a discussion about common challenges faced during contractor selection and project preparation.

# Activity 2: Planning and Preparing for Premises Cabling Installations:

# Explore the components of a comprehensive project schedule, including milestones, tasks, durations, dependencies, and critical paths.

# Explain the process of estimating material requirements based on project specifications, site surveys, and equipment lists.

# As a group, discuss factors that impact material estimates, such as cable types, connectors, patch panels, and support structures.

# Continue by asking the group to review strategies for optimizing labor allocation, managing workloads, and addressing skill gaps.

# Dive into the specifics of preparing a site for fiber optic installations, covering support structures, fire stopping, electrical systems, grounding, and cable marking.

# Ask for examples of how support structures and termination panels should be properly labeled.

# Through group questioning, review the installation checklist with participants, emphasizing key steps and best practices (pre-install, before starting the install, during the installation, and after completion of installation).

# Encourage participants to ask questions and seek clarification on checklist items

# Have participants think of real-world examples where adherence to the checklist would improve project outcomes.

# Activity 3: Safety Considerations:

# Emphasize the importance of prioritizing safety in all aspects of premises cabling installations.

# Highlight the potential hazards, including electrical risks, fall hazards, lifting injuries, and exposure to hazardous materials.

# Ask participants to review electrical safety protocols and guidelines specific to premises cabling installations, such as:

# Use of insulated tools and equipment to prevent electrical shocks.

# Proper grounding and bonding of all conductive components to mitigate electrical hazards.

# Adherence to National Electrical Code (NEC) or local electrical codes for safe installation practices.

# Review the use of personal protective equipment (PPE) such as insulated gloves, safety goggles, and non-conductive footwear.

# Ask the group to discuss proper ladder safety rules.

# Review the importance of fire stopping in premises cabling installations to prevent the spread of fire through penetrations.

# Summarize the key learnings from the session, emphasizing the importance of proper planning, safety measures, and installation techniques.

# Provide time for any questions before completing the lesson.

## Resources:

# Whiteboard or display for recording key discussion points.

# Paper, markers, pens

# Reflection Section

In what ways do you intend to continue learning and improving your expertise in cable installation and safety protocols? What are your key takeaways from the lesson? How do you envision implementing them in practical scenarios?

*This lesson is supplemental to the Fiber Optics lesson within FOA's Fiber U curriculum and not part of the FOA required curriculum to obtain the Certified Premises Cabling Technician certification. If interested in becoming an approved school and/or obtaining a certification, please contact FOA at*[*thefoa.org/contact-foa.html*](https://www.thefoa.org/contact-foa.html)*.*

*Note: AI, specifically ChatGPT 3.5, was used to generate timeline for this contextualized lesson plan.*