

CommScope

FOSC Preparation and Assembly

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Agenda:

- Safety Overview
- FOSC 450 overview
- Fiber cable – entry techniques
- Cable installation, traying and closure assembly
- Grounding and sealing
- Fiber 101

Objectives:

- Identify and prepare fiber cable for restoration
- Identify the components and functionality of FOSC closures
- Assist in emergency fiber restoration

Initial emergency restoration:

- Identify, isolate and secure fiber damage
- Identify fiber type and count
- Locate nearest slack span

Safety:

- Personal protective equipment
- Work zone/security
- Underground hazards
- Electrical hazards

Utilize Personal Protective Equipment



Always Survey and Secure Work Zone Aerial/Underground

In an emergency restoration, the priority should be first security then repair

- **Electrical “High Voltage” lines**
- **Vehicle traffic**
- **Inclement weather**
- **Fall Hazards**
- **Aerial equipment upset or tipping**
- **Objects falling onto workers or property**



www.youtube.com “live line demonstration”









Always Survey the Location and Secure Work Zone

- **Ensure the Aerial Bucket is parked with the appropriate precautions:**
 - **Vehicle and pedestrian warning signs displayed as required.**
 - **Lights and barricades in place as required.**
 - **Flashing lights on the vehicle turned on.**
 - **Cones placed as required**



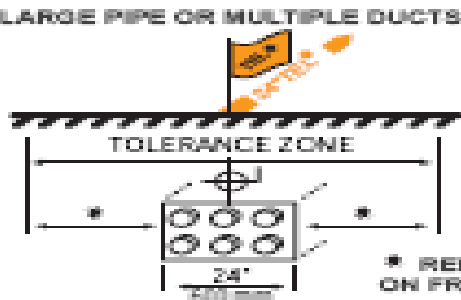
Underground Hazards - Warnings

APWA UNIFORM COLOR CODE

	WHITE - Proposed Excavation
	PINK - Temporary Survey Markings
	RED - Electric Power Lines, Cables, Conduit and Lighting Cables
	YELLOW - Gas, Oil, Steam, Petroleum or Gaseous Materials
	ORANGE - Communication, Alarm or Signal Lines, Cables or Conduit
	BLUE - Potable Water
	PURPLE - Reclaimed Water, Irrigation and Slurry Lines
	GREEN - Sewers and Drain Lines

TYPICAL MARKING

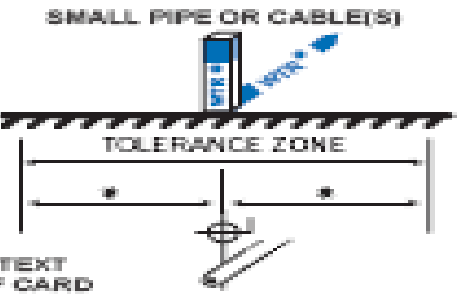
LARGE PIPE OR MULTIPLE DUCTS



TOLERANCE ZONE

24"
609 mm

SMALL PIPE OR CABLE(S)



TOLERANCE ZONE

* REFER TO TEXT ON FRONT OF CARD

Customize with your center's phone and address information

Underground Hazards - Warnings

Confirm placement of adjacent underground utilities



Heat blankets should be utilized if unsure or in joint trench situations

Electrical Hazards - Warnings

Voltage range (phase to phase, RMS)	Approach distance (inches)
300 V and less	Avoid Contact at minimum
Over 300V, not over 750V	12
Over 750V not over 2 kV	18
Over 2 kV, not over 15 kV	24
Over 15 kV, not over 37 kV	36
Over 37 kV, not over 87.5 kV	42
Over 87.5 kV, not over 121 kV	48
Over 121 kV, not over 140 kV	54



FOSC Overview

- Conforms to wide ranges of shapes and size of cable
- Gel stays flexible in wide temperature ranges
- Gel withstands harsh chemical environments
- Cold Sealed...no heat gun required

FOSC 450 D6
(432 splice capacity w/basket)

FOSC 450 C6
(144 splice capacity w/basket)

FOSC 450 B6
(144 splice capacity 6 trays w/basket)



Tools Required For Termination

- Alcohol wipes for gel filled cable
- Buffer tube cutter
- Ruler
- Fiber Scissors
- Small screwdriver
- Tie Wraps, large & small
- ¼" Nut driver
- Black marker



Identify contents of 1 FOSC 450 “B” closure

The FOSC “B” closure box will contain

- ✓ 1 Base, Dome, Dome clamp, O-Ring
- ✓ 1 Star bracket, tray tower, slack basket
- ✓ 1 Gel Seal end piece
- ✓ 2 Accessory bags
- ✓ 1 Installation Instructions

Large accessory bag contents

- ¼” nut driver
- Numeric labels
- Stranded fiber transport tubing (red)
- Ribbon fiber transport tubing (Green)
- Port plugs (4)
- Small tie wraps
- Felt tape

Small accessory bag contents

- Cable strain relief holders
- Hose clamps
- 6 small, and 2 large strength member attachment brackets with lugs
- Grounding straps



FOSC 450 INSTALLATION STEPS

STEP 1: Prepare Cables

STEP 2: Remove and Disassemble Closure

STEP 3: Attach Cable

STEP 4: Store Slack and Unspliced Fiber

STEP 5: Attach Splice Trays

STEP 6: Install Gel Block

STEP 7: Seal Closure

Thank You

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