



Figure 1. Interior Views of the CFDP10-EL18

Fiber Cable Preparation, Termination and Splicing Instructions for the CFDP10-EL18 and CFDP12-EL24 Series of Charles® Fiber CFDP™ Pedlock® OSP Pedestals for Fiber Interconnect Applications

1. GENERAL

1.1 Document Purpose. This document provides instructions for the fiber cable technician to properly perform fiber cable preparations, routings, splicing, terminations and connections within the Charles Industries' Fiber Distribution Point (CFDP™) EL series of Pedlock® pedestals with 10" or 12" domes. (The CFDP EL series offers an interior backboard designed for use in fiber applications where preconnectorized SC/APC or SC/UPC connections are desired, such as at cell sites to service multiple wireless operators). Figure 1 shows a dome-off interior-door-open view of a 10" dome CFDP10-EL18 model. The 12" models are identical except they support 24 drops. See Table 2 for information on all models in this series, or call Charles Industries (see Part 3) to request more information or literature.

- NOTE -

Hereafter all models in the series will be commonly referred to as the "CFDP" or "pedestal." Specific model numbers will be specified or referenced where important differences apply.

1.2 Document Status. Print 3 updates Table 2. Print 2 updated the document title, Paragraphs 1.1 and 1.3, Steps 1, 5, 16 and 29 of Table 1, Table 2 (added models with SC/APC adapters and separates and lists pigtails as kits), and added Paragraph 1.4.

1.3 Product Purpose and Description. The CFDP is an above-grade pedestal that offers excellent OSP protection against floods, fire, dirt, weather, insects, and impact for fiber-optic cable splices and customer service drops in FTTP deployments. This protection is achieved with a weather-resistant yet free-breathing interior enclosure that is within the confines of a protective, exterior, buried-distribution-cable pedestal. The bottom section of the pedestal is the base: a square-shaped, expanded-capacity, non-metallic, locking, 2-piece, split base designed to open and easily install around conduit-fed cable bundles or to accept less flexible cables. The top section of the pedestal contains a non-metallic outer dome, which covers and protects an inner double-door enclosure, which in turn protects the heart of the pedestal: the exclusive, versatile, and interchangeably-designed, metallic, interior backboard. Two locking doors are provided on the CFDP EL series, one on each side (CO-side vs. drop or customer side), to separate the drop connections from the CO feed connections. On both sides of the backboard, quick and easy connections are made with preconnectorized SC-type cables to SC-type adapters at the Interconnect bulkhead at the top of the backboard. The other end of the SC-type cable (pigtail) should be spliced to the feed cable within a provided splice tray. As an option, Charles provides three-meter-long SC-type pigtails for feed cable connections (see Table 2 for details). The sturdy,

versatile, metallic backboard also enables technicians to route, bond, and attach various cables, tubes, splice trays, splitters or other equipment. Grounding and bonding connections can be made either inside the locked interior compartment, or outside for easier line maintenance and testing. Charles' CFDP pedestals are designed to be installed in new or replacement installations, to accommodate various soil and mounting applications as well as various cable types and applications, to accommodate certain fiber slack situations, and to exceed Telcordia GR-771-CORE specifications.

1.4 Applications. The CFDP Interconnect Pedestal is ideal for multi-tenant cell site, campus or strip mall environments where the customer requires high-capacity fiber bandwidth for wireless backhaul, private networks or data and video broadband services. With a built-in SC/APC or SC/UPC adapter bulkhead, Interconnect pedestals facilitate fast and easy provisioning of fiber services to the end customer's fiber multiplexing equipment. Fiber drops can be turned up, moved or disconnected on an "as needed" basis, giving telecom service providers added flexibility in their efforts to provide broadband voice, data, and video services to customers whose bandwidth requirements may change seasonally or due to major events.

1.5 Product Mounting. The CFDP pedestal base is typically installed at the cell site or FTTP distribution point in a trench or hole in the ground up to the ground line indicator on the base. The pedestal backboard, where all cable preparations are performed, mounts to the base. Once all cable connections are complete, the inner doors are secured to protect all cabling and connections, then the outer dome is placed over and attached to the base for further protection. The base contains holes or knockouts at the rear and both sides that accept an optional, metallic, mounting stake or a pole-mount stake.

- CAUTION -

Perform all bonding and grounding prior to making any electrical and communications connections.

2. CABLE INSTALLATION AND SPLICING

Table 1 helps the cable technician to perform all fiber feed and drop cable preparations, routings, attachments, splicing, and connections, and presumes the following conditions:

- **Site Cable Configuration or Deployment** - The fiber cable deployment is a CO or feed cable in a stub-end configuration (though not described in these instructions, these pedestals support loop-through applications, as well).
- **Equipment Installation** - A CFDP™ base has been properly installed at the desired field site (for base installation information, see the pedestal base installation document factory-attached to the base).
- **Trench Setup** - The trench is either dug and open, or backfilled with the feed cable already placed and brought into the base bottom.
- **Feed Cable Type or Design** - The CO or feed cable is a loose-buffer-tube type with single fibers.
- **Drop Cable Type** - Drop cables are SC/UPC or SC/APC-type preconnectorized cables.
- **Transportation Tubing** - Protective, flexible, transportation tubing is provided for the feed cable pigtails (two 3-foot long pieces).

For information regarding other pedestal installation types or applications, or cable deployment types, contact Charles Industries at the phone number provided in Part 3.

3. CUSTOMER TECHNICAL SERVICE

If technical assistance or customer service is required, contact Charles Industries by calling or using one of the following options:

- | | |
|---|--|
| 847-806-8500 (Tech. Service local) | 847-806-6300 (Customer Service) |
| 800-607-8500 (Tech. Service toll-free) | 847-806-6653 (Customer Service FAX) |
| 847-806-8556 (Tech. Service FAX) | mktsterv@charlesindustries.com (email) |
| techserv@charlesindustries.com (email) www.charlesindustries.com (website) | |

- EYE DAMAGE WARNING -

Risk of serious eye damage! Never look into the end of a fiber optic line nor use a magnifier in the presence of laser light or radiation. Always exercise caution when installing, testing, or performing maintenance on live circuits. If eye exposure to laser light or radiation has occurred or is suspected, immediately seek medical treatment by a professional eye care physician.

- FIBER OR CABLE DAMAGE CAUTION -

Buffer tubes and fibers are sensitive to bending, pulling, and crushing forces. Avoid buffer tube kinking and fiber damage: use care when working with fiber and do not violate fiber, buffer tube, and cable minimum bend-radius requirements.

In cold environments, some loose tube cable designs may exhibit low temperature induced signal attenuation when long lengths of buffer tubes have been exposed and then stored. Contact the cable manufacturer concerning recommended exposed buffer tube lengths in your installation area.

- WARNING -

Cable and fiber cleaning solvents may contain hazardous materials or harmful ingredients. Always read and follow the manufacturer's precautions, warnings, and instructions when working with cleaning solvents or products.

Shards and cleaved glass fibers are very sharp and can easily pierce the skin. Use tweezers to pick up cut glass fibers and place them on a loop of tape or in a container specifically meant for this purpose. Good housekeeping is important.

Corrugated metal or armor that may be present in feed cables is very sharp when cut or exposed. Exercise extreme caution to prevent personal injury. Use protective work gloves when handling armored cable.

Table 1 - Branch or Stub-End Configuration Installation

Step #	Instruction																										
1.	<p>Obtain tools, materials and equipment. Assemble the following tools and equipment to perform fiber feed/drop cable connections in the installed CFDP pedestal.</p> <table border="0"> <tr> <td><input type="checkbox"/> 216 tool/can wrench</td> <td><input type="checkbox"/> Properly installed base of CFDP10/12 model</td> </tr> <tr> <td><input type="checkbox"/> Tape measure</td> <td><input type="checkbox"/> Dome & backboard with double doors (provided)</td> </tr> <tr> <td><input type="checkbox"/> Cable marking tool</td> <td><input type="checkbox"/> Bag of parts (provided with the pedestal)</td> </tr> <tr> <td><input type="checkbox"/> Labels for cables (optional)</td> <td><input type="checkbox"/> Assorted cable ties (12 provided)</td> </tr> <tr> <td><input type="checkbox"/> Hose clamps (2 provided)</td> <td><input type="checkbox"/> Splice tray and labels for splice tray (2 provided)</td> </tr> <tr> <td><input type="checkbox"/> Cable bond clamps (optional)</td> <td><input type="checkbox"/> Knife, snips, or puncture tool (to cut grommets)</td> </tr> <tr> <td><input type="checkbox"/> Proper length drop cables</td> <td><input type="checkbox"/> Cable-entry tool or utility knife with hook blade</td> </tr> <tr> <td><input type="checkbox"/> Drop trenching equipment</td> <td><input type="checkbox"/> Buffer tube stripper tool (to score/cut buffer tubes)</td> </tr> <tr> <td><input type="checkbox"/> Wrenches or socket set</td> <td><input type="checkbox"/> Fiber optic stripper tool (for 900 micron pigtails)</td> </tr> <tr> <td><input type="checkbox"/> Slotted screwdriver</td> <td><input type="checkbox"/> Fiber splicing tools and equipment</td> </tr> <tr> <td><input type="checkbox"/> Gel removal compound (to clean stripped cables)</td> <td><input type="checkbox"/> Tweezers & tape (for cleaved glass fibers/shards)</td> </tr> <tr> <td><input type="checkbox"/> Safety glasses & work gloves (optional)</td> <td><input type="checkbox"/> Isopropyl alcohol & clean wipes (to clean fibers)</td> </tr> <tr> <td><input type="checkbox"/> Site clean-up tools</td> <td><input type="checkbox"/> Grounding equipment & tools</td> </tr> </table>	<input type="checkbox"/> 216 tool/can wrench	<input type="checkbox"/> Properly installed base of CFDP10/12 model	<input type="checkbox"/> Tape measure	<input type="checkbox"/> Dome & backboard with double doors (provided)	<input type="checkbox"/> Cable marking tool	<input type="checkbox"/> Bag of parts (provided with the pedestal)	<input type="checkbox"/> Labels for cables (optional)	<input type="checkbox"/> Assorted cable ties (12 provided)	<input type="checkbox"/> Hose clamps (2 provided)	<input type="checkbox"/> Splice tray and labels for splice tray (2 provided)	<input type="checkbox"/> Cable bond clamps (optional)	<input type="checkbox"/> Knife, snips, or puncture tool (to cut grommets)	<input type="checkbox"/> Proper length drop cables	<input type="checkbox"/> Cable-entry tool or utility knife with hook blade	<input type="checkbox"/> Drop trenching equipment	<input type="checkbox"/> Buffer tube stripper tool (to score/cut buffer tubes)	<input type="checkbox"/> Wrenches or socket set	<input type="checkbox"/> Fiber optic stripper tool (for 900 micron pigtails)	<input type="checkbox"/> Slotted screwdriver	<input type="checkbox"/> Fiber splicing tools and equipment	<input type="checkbox"/> Gel removal compound (to clean stripped cables)	<input type="checkbox"/> Tweezers & tape (for cleaved glass fibers/shards)	<input type="checkbox"/> Safety glasses & work gloves (optional)	<input type="checkbox"/> Isopropyl alcohol & clean wipes (to clean fibers)	<input type="checkbox"/> Site clean-up tools	<input type="checkbox"/> Grounding equipment & tools
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Preparing and Opening the Pre-Installed CFDP Pedestal

2. Verify pedestal is installed and inspect. Find the CFDP pedestal installation site, inspect it, and verify the pedestal is properly installed in the ground. New pedestals should be inspected thoroughly upon delivery. If the equipment was damaged in transit, immediately report the damage to the transportation company.

3. Remove outer dome from base. If not already off, remove the outer dome with a 216 tool or can wrench. Turn the snap lock's hex nut 1/4-turn counterclockwise, hold it in that position, then lift up on the dome. Set the dome aside until needed.

4. Open inside doors. Open the internal doors of the CFDP using a 216 tool or can wrench on the cup-washer screws. Each door contains two cup-washer screws.

5. Remove plastic bag and verify contents. Locate the clear, plastic bag that is typically attached to the pedestal's interior backboard and verify the following contents:

- 6 cable ties
- 2 bond straps
- 2 hose clamps
- document
- 1 FOSC B splice tray and tray label

6. Remove backboard (optional, to facilitate earth ground installation). Remove the backboard, if needed or desired, to facilitate the earth ground installation, per local company practice. Remove the backboard by first pressing one finger push tab (located inside the base collar at the support leg), pulling up on the support leg, and then secondly, pressing the other leg's push tab and pulling up on the other support leg. When the tabs are disengaged or released, pull the backboard out of the base and temporarily set it aside.

7. Verify/prepare earth ground. Always follow local codes and company practice when grounding cables/equipment. If an earth ground is not present at the pedestal site and local practice requires an earth ground, prepare one at this time. Do not connect earth ground until the backboard is re-attached to the base.

Preparing the Feed or Branch Stub Cable

8. Verify sufficient feed cable length. Verify 9 feet (approx.) of cable, from the ground line to the cable's stub-end, extends up through the pedestal base, and lift it up. Press the cable toward the rear of the base so it will be at the CO or feed side of the backboard (the side with fewer but larger rubber grommet ports), when it is installed. See the base installation document for instructions on installing the base and routing cables into the base.

9. Attach backboard. (Skip this step if the backboard is already installed.) First, position the feed cable so it will be at the CO or distribution side of the backboard (see Figure 1). Then install the backboard to facilitate marking the cable for the proper cable sheath removal length. Align the backboard's support legs with the leg guides in the base collar. Once the leg guides are lined up, press down on the backboard until it stops and the tab locks are engaged (audible clicks indicate proper leg insertion).

10. Locate and remove single-port feed grommet. Grommets on the CO or feed cable side of the backboard accept one feed cable each (as opposed to the drop cable grommets which accept two smaller cables). Pull or slide out one of the single-port feed-side grommets from the bottom grommet plate. With a sharp or pointed tool, poke a small hole in the center of the grommet.

11. Push cable through grommet and re-install grommet. Place the bottom center of the poked grommet at the stub end of the cable and push the grommet down over the cable end. Slide the grommet down the cable, stopping about 5" above the base. Rotate the grommet, slide it up or down as necessary to get the proper vertical alignment, align it with its slot on the grommet plate, then re-insert the grommet in the plate.

12. Mark cable for sheathing removal. The cable sheathing must be removed from the cable stub to expose the fiber to be spliced, but enough cable length with sheathing must remain to hold it in place against the backboard. On the feed side of the backboard, locate the "T" cable tie-down located directly above the chosen grommet, pull the cable up until it is almost taut, hold the cable against the T, and mark a cut-line on the cable midway between the T and cable strength member clamp above it (approximately 7 inches above the top of the base collar).

13. Remove backboard and/or grommet, for sheathing removal (optional). If desired, remove the grommet or backboard (or both) to facilitate the sheathing removal and bond clamp installation procedures. See Step 6 to remove backboard.

14. Remove cable sheathing and cut strength members. Use the tool and method of choice to remove the outer cable sheath from the mark to the cable end (approx. 7.5 feet) to expose the buffer tube and strength members. Discard the removed sheathing. Per company practice, trim the cable strength member(s) approximately 4" longer than the cable sheath cut (so 4" remains). Do not cut the buffer tube.

15. Clean buffer tube. Per company practice and cable type, find, unwrap, expose, and clean the buffer tube, as needed.

16. **Attach bond clamp to cable.** To prepare the cable for bonding to the pedestal bonding plate, attach a company-approved cable bond clamp to the cable/shield at the sheath cut. Always follow clamp manufacturer instructions or company practice to attach cable bond clamps, as procedures and clamps used to bond cables may vary per location, application, and cable type and size.

17. **Cut to length then remove buffer tube.** Measure then make a mark on the buffer tube approximately 32" from the cut end. Using local company procedures and tools, and being careful to avoid the fiber inside the tube, score the tube at the mark and remove the 32" length of surplus tube and discard it.

18. **Clean fibers.** Per company practice, clean the fibers.

19. **Attach backboard.** If still removed, re-attach the backboard (see Step 9).

20. **Connect earth ground to ground lug.** Per local codes and/or company practice, install an earth ground wire of proper gauge from the earth ground to the pedestal at the ground plate's ground lug. Always perform grounding prior to cable attachment.

21. **Bond cable to ground plate.** Attach a bond strap (provided) from the cable bond clamp (shown in Step 16) to one of the bond posts (see Step 20 for bond post locations).

22. **Secure cable to backboard's T tie-down.** First, if the cable has strength members (and they were not terminated in an optional cable bond clamp), loosen the strength member clamp located above the chosen grommet, and slide the strength members under it. Next, place the cable against the cable mounting plate at the T tie-down, and vertically align the cable so the sheath cut is midway between the T and strength member clamp above it (about 1.5" above the bottom of the T). Hold the cable in this position and secure it to the T by opening and firmly affixing a hose clamp around both the cable and T tie-down.

23. **Tighten strength member clamp (optional).** If the strength members were placed under the strength member clamp in Step 22, secure them by tightening the hex nut of the strength member clamp. Trim the strength members per company practice.

24. **Route the tube/fiber into fiber basket.** Route the buffer tube up through the bottom opening of the fiber basket, and wrap the length of tube inside the basket (about 2 loops). Secure the tube to the inside walls of the basket with cable ties, especially where it first enters the basket, but do not secure the last 3 feet of tube. After the tube is attached to the splice tray in Step 26, this 3' length will allow the technician sufficient tube slack when the splice tray is accessed for fiber splicing.

25. **Prepare a splice tray for tube attachment.** Prepare a splice tray (provided) by removing the cover and starting two cable ties at a top tray corner, using the inner tie-down slots. Two trays are advised if using more than 12 pigtails.

26. **Attach tube to tray.** Overlap the buffer tube onto the tray corner about 1" (see Step 27), then secure the tube to the tray with the two positioned cable ties.

27. **Store fibers in splice tray.** Per company practice, wrap and store the fibers in the splice tray for later splicing, then attach the tray cover. Use additional trays as needed.

28. **Label the tube.** Label both tube ends, per company practice.

29. **Locate or obtain SC-type pigtails.** Separately-ordered SC/APC- and SC/UPC-type pigtail kits are available from Charles (see Table 2). Obtain the correct type of pigtails for the Interconnect pedestal used in this installation.

30. **Attach SC-type connector end of pigtails.** Attach the connector end of the SC-type pigtails to the SC-type bulkhead adapters at the top of the backboard. Remove the caps from the adapters prior to inserting the connectors. Follow company practice for correct cable color-coding, and consult the label on the front side of the bulkhead to locate the proper line numbers.

31. **Route pigtails behind protection plate.** Once all pigtail connectors are attached to the bulkhead, route their free ends (either singly or collectively) behind the pigtail protection plate, starting at the left side of the plate, then guide them down into the fiber basket area.

32. **Route free ends of pigtails through transportation tube.** Provided are two 3-foot lengths of plastic 1/4" tubing to protect the 900-micron pigtail cables. Gather the free ends of the connected pigtails (12 pigtails per tray and tube), align their ends as a group, and collectively guide them into a transportation tube. Grouping the fibers provides greater rigidity. Slide the fibers through the tube until the free ends exit the opposite tube end.

33. **Attach one end of transportation tube to the basket.** With a cable tie, doubled over, attach one end of the transportation tube to the top, left, inside wall of the fiber basket.

34. **(Optional - trim transportation tube to proper length.)** Before attaching the tube to the splice tray, verify the tube length allows the splice tray (which is attached to the tube in the next step) to be easily positioned at the front of the fiber basket after the tube is positioned in the basket. If needed, the transportation tube can be cut to length, or trimmed approximately 4", if company practice is to wrap or loop it just one time down into the fiber basket and then up and over the bend-radius control. Alternately, the uncut tube can be looped twice within the fiber basket, then routed up and over the bend-radius control.

35. **Prepare splice tray, attach other end of transportation tube.** Again prepare the splice tray for tube attachment, starting two new cable ties at the same tray corner as before, using the outer tie-down slots. Overlap the transportation tube onto the tray corner about 1" (alongside the feed tube), then secure the tube to the tray with the two, new, positioned cable ties. If splicing is not performed at this time, wrap the pigtails in the tray per company and tray manufacturer instructions, and continue with Step 36. If splicing is to be performed at this time, proceed to Step 38.

36. **Perform tube management.** Always keep tubing neat and free of kinks. To manage the tube slack, loop and store the tubes inside the fiber basket, and hang the tube-end with the attached splice tray up over the bend-radius control near the top of the backboard. If desired, starting at the splice tray, attach the length of transportation tube to the feed tube with cable ties at short intervals, for easy joint tube management. Allow the splice tray to rotate freely when looping the tubes for storage, to avoid stressing and kinking the tubes, which could cause fiber damage.

37. **Close the pedestal (optional).** If splicing or drop cable installation will be performed at a later time, do Steps 44-45 now to secure the splice tray(s) and to close the pedestal. Go to Step 38 to perform splicing. Go to Step 46 to install drop cables.

Splicing Fibers at the CFDP Pedestal

38. **Obtain tools.** Prepare the area for splicing, and assemble and prepare any equipment and tools needed to splice fibers. Review all the cautions and warnings herein.

39. **Open pedestal.** Remove the dome and open the CO side door, per Steps 3 and 4.

40. **Remove the splice tray(s) from the backboard.** Loosen the VELCRO® straps that secure the splice tray(s) and pull out the tray(s), unwinding/rotating it and the tubes attached to it. Detach the clear plastic cover from the splice tray(s).

41. **Perform splicing.** Unwrap the working fibers to be spliced, perform all fiber splicing at this time, and when complete, route/place the spliced fibers back into the splice tray(s), all per local/company practice and product manufacturer's instructions.

42. **Label and identify splices/tray.** Per company practice, label/identify the splices.

43. **Cover splice tray(s).** Re-attach the cover(s) to the splice tray(s).

44. **Secure tray.** Secure the splice tray(s) to the backboard. To do this, wind or rotate the tubes and the tray(s) as needed to loop and store the tubing in the fiber basket, then hang the splice tray(s) from the bend-radius control by routing the last foot of tubing over the bend-radius control. Secure the tray(s) to the tabs at the front of the fiber basket with the provided VELCRO® straps. See Step 34 for alternate tube routing.

45. **Re-check foam plug placement and cable management, and close the pedestal.** Perform Steps 54 through 56 to carefully close up the pedestal.

Installing Fiber Drop Cables

46. **Dig trench from premises to pedestal.** Per company practice, prepare a trench to run the drop cable to the pedestal. Clear the soil from the bottom front of the base, where the cable enters at the drop cable access hole.

47. **Run the drop cable.** Route the preconnectorized drop cable through the trench to the pedestal base. Verify 9 feet of cable will be available above the ground line.

48. **Bring cable into base through drop cable channel or conduit.** Per company practice, route the drop cable through the drop cable access hole at the bottom front of the base and push it up through the channel (or conduit) provided for the drop cables. At the top of the channel, guide the cable between the foam plug (installed at the top of the channel) and the back wall of the channel. If the plug dislodges during cable routing (after all cables are routed through the base to their final length), re-install the plug by placing it in front of the cables (cables at the back of the channel), angling the plug's front edge down and forward toward the first rib of the base front, and sliding it down and forward until it rests on top of the base's first rib. Press down on the plug's back edge until it rests on the bent flange at the rear of the channel.

49. **Route cable through grommet.** At the drop cable side of the backboard, at the bottom grommet plate, pull or slide out one of the double-port grommets. Feed the preconnectorized cable through the grommet port by slicing into the grommet port at the notch provided in it, then pressing or sliding the drop cable into the grommet port at the sliced notch. Slide the grommet down the cable until it is at the level of the grommet plate. Rotate and align the grommet with its slot, and re-insert the grommet into the grommet plate. Always populate or use the rear-most ports first, for best hand and tool access and mobility.

50. **Secure cable to backboard.** Secure the cable to its appropriate tie-down T or tie-down slot (see the drawing in Step 49) with a hose clamp. If cable ties are used, per company practice, double the tie over the cable and T or slot, crisscross it, and tighten the tie. Cables that are routed through rear grommet ports should use the T's on the backboard rear wall. T's (and slots) are also provided on the cable mounting brackets which are perpendicular to the back wall. Use the bracket T's and slots with the front grommet ports (the bracket T is used with the front port of the grommet to the left of the bracket, and the bracket slot is used with the front port of the grommet to the right of the bracket).

51. **Label drop cable.** Label the/all drop cable(s) with a cable marker or label. This facilitates later cable identification for future troubleshooting, splicing, or rework.

52. **Route, secure, and connect drop pigtail.** Route and loop the drop cable pigtail around the inside perimeter of the drop side backboard and hang the last slack loop from the bend-radius control. Size the loops so that the connector will easily (without tension) reach the appropriate bulkhead adapter. Secure the cable to the backboard tie-down slots with cable ties at regular intervals. Plug the first connector into adapter 1 at the top front corner. Adapter 2 is directly below it in the same column.

53. **Prepare all drops.** Repeat Steps 46-52 for all customer drop cables ready for installation and connection at this time. If splicing is to be performed, go to Step 38.

54. **(Re)Place foam plug.** Verify the foam plug is properly installed in the drop channel (see Step 48). If it was removed or dislodged, re-install it at this time.

55. **Re-check cable management & lock inner door(s).** Verify all tubing is neat and not kinked, and that no cables, ties, wires or tubes protrude beyond the backboard walls. Close and lock the inner doors by turning all cup-washer screws clockwise until tight.

56. **Close the pedestal.** Locate the outer dome and orient it so the snap lock faces the front (the Charles logo is on the base front). Slide the dome down over the backboard, align the dome's snap lock with the base's latch catch, and allow the self-locking dome to drop down in place. An audible "click" indicates the dome is locked.

Table 1. Branch or Stub-End Configuration Installation

Table 2. Model Numbers and Ordering Information	
Model #	CFDP™ Description
CFDP10-EL18	CFDP™ Interconnect Pedestal, OSP Pedestal, with a 10" diameter, locking, exterior dome, a square, 2-piece, expanded-capacity, split base, a weather-tight interior enclosure with two locking doors, a removable backboard for fiber cable routing, attachment, storage, and splicing (ray capacity = 5 trays/120 splices at 24 fibers per tray), a pre-connectorized bulkhead with 18 SC/APC adapters, 4 single-port 1" diameter feed grommets and 9 double-port 0.625" diameter drop grommets for 18 drops, one FOSC B splice tray, a ground/bond plate and two 3' lengths of transportation tubing. Includes all equipment shown herein.
CFDP10-EL18C	Same as above but with SC/UPC-type adapters in the interconnect bulkhead.
CFDP12-EL24	Same as CFDP10-EL18 but with 24 SC/APC adapters in the pre-connectorized bulkhead, a 12" dome, 6 single-port 1" dia. feed grommets, 12 two-port 0.625" diameter drop grommets for 24 drops, and an 8 tray capacity.
CFDP12-EL24C	Same as CFDP12-EL24 but with SC/UPC-type adapters in the bulkhead.
Optional Equipment for Use with CFDPs	
97-SCAPC18PT	Kit of 18 fiber pigtails: SC/APC-type connector, color-coded, 900 micron, 3 meters
97-SCUPC18PT	Kit of 18 fiber pigtails: SC/UPC-type connector, color-coded, 900 micron, 3 meters
97-SCAPC24PT	Kit of 24 fiber pigtails: SC/APC-type connector, color-coded, 900 micron, 3 meters
97-SCUPC24PT	Kit of 24 fiber pigtails: SC/UPC-type connector, color-coded, 900 micron, 3 meters
97-001911-A	Grommets, feed-side type, one 1" port per grommet, 50-piece kit.
97-001753-A	Grommets, drop side, middle type, two 0.625" ports per grommet, 50-piece kit.
97-PKOR10A	Dome cap, high visibility, orange, 10"
Riser Pipes & U-Guards	<ul style="list-style-type: none"> 119 series (7/8" risers) 122 series (7/8" U-guards) 219 series (1.25" risers) 222 series (1.25" U-guards)

Various replacement parts are available. Contact Charles Industries for more information.

Table 3. Physical Specifications				
Feature	10" dome models		12" dome models	
Height, overall	50.5 in.	128.3 cm	50.5 in.	128.3 cm
Height, base only, incl. collar (stake only for IPS)	18.5 in.	47 cm	18.5 in.	47 cm
Height, dome only	35.5 in.	90.2 cm	35.5 in.	90.2 cm
Height, base bottom to ground line	8.5 in.	21.6 cm	8.5 in.	21.6 cm
Height, dome top to ground line	42 in.	107 cm	42 in.	107 cm
Depth, base (front to back)	12.8 in.	32.5 cm	15.1 in.	38.4 cm
Width, base (side to side)	13.9 in.	35.3 cm	16.1 in.	41 cm
Diameter, base collar, O.D.	10.75 in.	27.3 cm	12.75 in.	32.4 cm
Diameter, base collar, I.D.	10.3 in.	26.2 cm	12.3 in.	31.2 cm
Diameter, dome, O.D. (not the cap)	11.25 in.	28.6 cm	13.25 in.	33.6 cm
Diameter, dome, I.D.	10.85 in.	27.6 cm	12.85 in.	32.6 cm
Weight	36 lbs.	16.4 Kg	44 lbs.	20 Kg

NOTE: All dimensions and weights are approximate.