

WALL MOUNT CABINETS (for 12 and 24 fibers)

Be sure to read and completely understand this procedure before applying product. Be sure to select the proper Optical Cable Corporation product before application.

Catalog#	Product Description (Where color is: A = Almond, B = Black)
WTC12/24A	Wall Mount Cabinet with Fiber Mgmt System, accepts up to 4 Adapter Plates
WTC12/24B	Wall Mount Cabinet with Fiber Mgmt System, accepts up to 4 Adapter Plates

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1.00 NOMENCLATURE



FIGURE 1 - CABINET (WTC12/24X SHOWN)

- 1.01
1. Wall Mount Cabinet Assembly
 2. Adapter Plate (sold separately)
 3. Small Parts Bag (mounting screws, tie wraps, ground lug)

2.00 DESCRIPTION

- 2.01 The Wall Mount Cabinets are designed to protect and organize optical fiber splices and connectors in a standard equipment rack in the central office, equipment room, and CEV.
- 2.02 Two sizes of cabinets with integral Splice Blocks are available to accommodate from 12 to 24 fiber splices and connectors. Cabinets with Splicing Systems are available for 48 to 144 splices and connectors.
- 2.03 Adapter Plates are available with all standard fiber optic connectors (6 connectors per plate) and are ordered separately. (See Section 10.00)

3.00 MOUNTING ON WALL

- 3.01 Remove the front cover by lifting off the lower hinge section.
- 3.02 Remove the cover from splicing chamber (if provided) by lifting out of the slots on the left side.
- 3.03 Position the rear section of cabinet against the plywood backboard or wall where it is to be located, level, and mark the center of the four mounting hole locations.
- 3.04 If a plywood backboard is used, drill a small pilot hole at the marks, otherwise install the appropriate anchors at marked locations.
- 3.05 Fasten cabinet securely to the wall.
- 3.06 Secure the ground lug to the hole in the left side of the cabinet with the 1/4-20 x 1/2" pan head screw, nut, and lockwasher included with the ground lug kit.
- 3.07 Ground the cabinet to an approved ground with a #6 solid copper wire (or equivalent) attached to the ground lug.

4.00 FIELD TERMINATION APPLICATIONS

- 4.01 Remove the plug from cable entry in the rear section to be used (top or bottom), and install the appropriate non-metallic conduit fitting (if required).
- 4.02 Install the L-Bracket Assembly adjacent to the entry being used with the 1/4" screw, nut, and lock washer provided.
- 4.03 Feed the cable through the conduit (if required) into and through the cabinet.
- 4.04 With the end of the cable jacket extending about 1-1/2" into the cabinet, remove a minimum of 60" of jacket to 80" of jacket from the cable for the WTC12/24X cabinet.
- 4.05 If required, install a bond connector at the end of the cable jacket, and secure it to the L-Bracket Assembly.
- 4.06 Capture the central strength member or any other strength member into the clip on the L-Bracket Assembly.

- 4.07 Install the Adapter Plates (purchased separately) in the cabinet bulkhead. Push the locking fasteners at the ends of the Adapter Plates to secure them in place.
- 4.08 Route the individual jacketed fiber elements around the Fiber Radius Hoops twice, then through the middle of the Radius Hoops to the Adapter Plates.

TIP: Be sure to maintain a 1-3/4" to 2" bending radius on the individual fiber elements as they go around the top or bottom Radius Hoop and through the center of the Radius Hoops.

- 4.09 Mark the jacketed fiber elements at a point about 1" beyond where they contact the bulkhead (this provides additional fiber length for application of the connectors).
- 4.10 Field install the connectors to the jacketed connector supplier.
- 4.11 Install the connectorized fiber elements to the bushings on the Adapter Plates.

5.00 PIGTAIL/SPLICING APPLICATIONS

- 5.01 Sections 6.00 through 8.00 detail the steps required where pigtails are used, and spliced into the feeder cables within the cabinet.

6.00 PREPARATION AND ROUTING OF FEEDER CABLE

- 6.01 See SECTION 4.00, instructions 4.01 through 4.04 (if required).
- 6.02 Thoroughly remove all filling compound from the unitube using your accepted company practices.
- 6.03 If required, install a bond connector at the end of the cable jacket, and secure it to the L-Bracket Assembly.
- 6.04 Capture the central strength member and any other strength member into the clip on the L-Bracket Assembly.
- 6.05 Mark the unitube about 3" beyond the end of the L-Bracket Assembly.
- 6.06 Remove the unitube up to the mark and clean according to your accepted company practices.

- 6.07 Loosely route the bare fibers twice around the splicing compartment and into the bottom groove of the Splice Block. (as shown in Figure 2) Cut off excess fiber length just beyond the end of Splice Block.
- 6.08 Drape the fibers over the Fiber Radius Hoops and use the felt strips (purchased separately) to secure the fibers to the back of the splicing compartment.

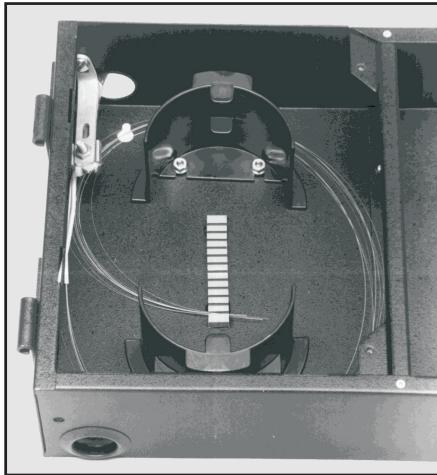


FIGURE 2 - ROUTE FIBER

7.00 PIGTAIL PREPARATION & ROUTING

- 7.01 The required pigtail lengths for WTC12/24X Wall Mount Cabinet is 3 meters.
- 7.02 Select one of the Adapter Plates (purchased separately). Install it in one of the locations in cabinet bulkhead with locking fasteners on the inside of the splicing compartment. Push the locking fasteners at the ends of the Adapter Plate to secure it in place.

TIP: Install the back Adapter Plates first to ease assembly.

- 7.03 Select six pigtails, clean the fiber connector, and connect them to the splice chamber side of the Adapter Plate.
- 7.04 Route the pigtails through the center of the Fiber Radius Hoops, around the splicing compartment one and one-half turns and into the Splice Block. (as illustrated in Figure 3) Remove excess pigtail length.
- 7.05 Mark the jacket of each of the pigtails at a point 2" beyond the bending radius. (as shown in Figure 4)
- 7.06 Carefully remove the jacket on each pigtail

up to the mark. Number or color code the connector strain relief and the 900 micron tight buffer for fiber identification.

TIP: Optical Cable Corporation has pigtails available with different colored 900 micron tight buffer coating to simplify fiber identification. (See Section 10.00)

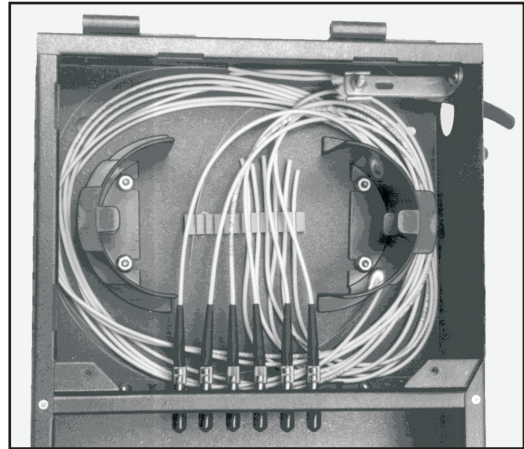


FIGURE 3 - ROUTE THE PIGTAILS

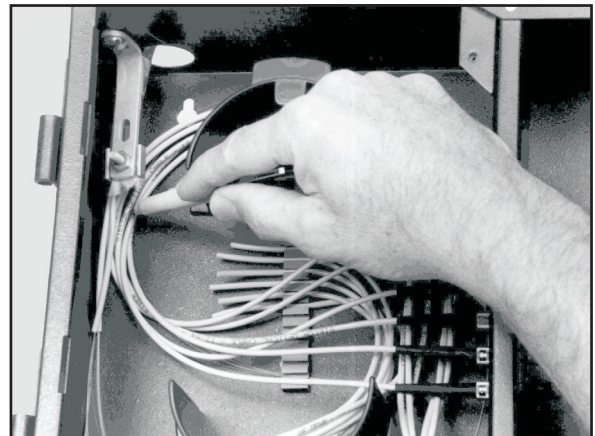


FIGURE 4 - MARK PIGTAILS

8.00 FIBER SPLICING AND ROUTING

- 8.01 Lay the pigtail fibers into individual grooves of the Splice Block and mark pigtail fibers just beyond the center of the Splice Block.
- 8.02 Disconnect the Adapter Plates with installed pigtails from the bulkhead and remove the pigtails from the splicing compartment for the splicing operation.
- 8.03 Mark the feeder cable fibers just beyond the center of the Splice Block and uncoil the fibers from the splicing compartment for the splicing operation.

TIP: Use felt tape (purchased separately) to secure the fibers to the back of the splicing compartment just beyond the end of the unitube to avoid undue bending of the fibers during this operation.

8.04 Splice the pigtail fibers to the feeder cable fibers using accepted company practices.

TIP: Use the cover of the splicing compartment (purchased separately) as a worktable by placing it into grooves at the bottom of splicing compartment.

8.05 Lay the completed splices into individual grooves of the Splice Block.

9.00 JUMPER ROUTING

9.01 Clean the fiber connectors and attach the jumpers to right side of the Adapter Plates.

9.02 Gently bend the jumpers toward and through the grommet on either the top or bottom of the cabinet.

9.03 Lightly secure the jumpers to the tie down post with the tie wraps provided.

10.00 ACCESSORIES

10.01 Table 1 details the Adapter Plates and Pigtail Assemblies available for the Wall Mount Cabinets.

11.00 SAFETY CONSIDERATIONS

11.01 This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. Failure to follow these procedures may result in personal injury.

11.02 When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact.

11.03 For proper performance and personal safety, be sure to select the proper size Optical Cable Corporation product before application.

11.04 This product is intended for use by trained technicians only. The product **should not be used** by anyone who is not familiar with, and not trained to use it.

TABLE 1

ADAPTER PLATE ASSEMBLIES	
Catalog#	Description
616MMST	Plate equipped with 6 multimode ST adapters
616SMST	Plate equipped with 6 singlemode ST adapters
616MMSC	Plate equipped with 6 multimode SC adapters
616SMSC	Plate equipped with 6 singlemode SC adapters
616MMFC	Plate equipped with 6 multimode FC adapters
616SMFC	Plate equipped with 6 singlemode FC adapters
616MMDLC	Equipped with 3 multimode duplex LC adapters
616SMDLC	Equipped with 3 singlemode duplex LC adapters
600	Blank Filler Plate (no port holes or adapters)
12 FIBER PIGTAIL ASSEMBLIES	
Catalog#	Description
P5ST12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 50µm multimode ST connectors
P6ST12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 62.5µm multimode ST connectors
P8ST12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 9µm singlemode ST connectors
P5SC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 50µm multimode SC connectors
P6SC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 62.5µm multimode SC connectors
P8SC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 9µm singlemode SC connectors
P5FC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 50µm multimode FC connectors
P6FC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 62.5µm multimode FC connectors
P8FC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 9µm singlemode FC connectors
P5LC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 50µm multimode LC connectors
P6LC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 62.5µm multimode LC connectors
P8LC12-3M	12 fibers with different colored 900µm buffers, 3 meters long, 9µm singlemode LC connectors

NOTE: Contact Optical Cable Corporation for additional adapter plates and pigtail assemblies.



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