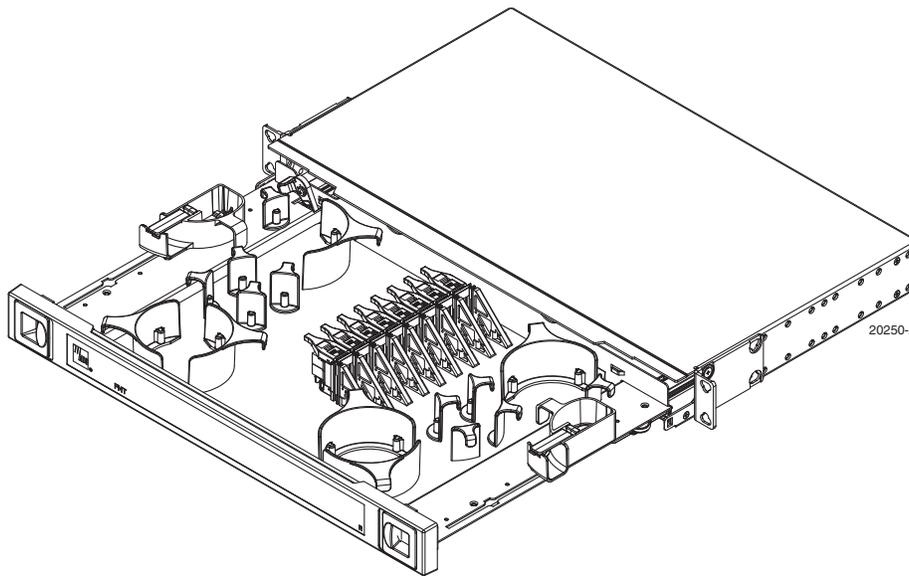


Fiber Management Tray-D (FMT-D)



Fiber Management Tray

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INTRODUCTION

This manual describes the CommScope Fiber Management Tray-D (FMT-D) and provides all information required to install and use this product.

The FMT is a fiber optic tray that provides a variety of rack-mount and functional options. All options are covered in this manual to the extent of relevance when the FMT is installed and used.

Revision History

ISSUE	DATE	REASON FOR CHANGE
Issue 1	11/2001	Original.
Issue 2	04/2003	Revised to reflect changes in product design.
Issue 3	06/2004	Add attenuator information.
Issue 4	06/2005	New spring lock and mounting brackets. Update cable routing.
Rev B	November 2020	Changed to CommScope format.

Trademark Information

CommScope (logo) and CommScope are trademarks of CommScope, Inc.

ADMONISHMENTS

Important safety admonishments are used in this manual to warn of possible hazards to persons or equipment. The admonishments — in the form of Dangers, Warnings, and Cautions — must be followed at all times. These warnings are flagged by use of a triangular alert icon (shown below), and are listed in descending order of severity of injury or damage and likelihood of occurrence.



Danger: *Danger is used to indicate the presence of a hazard that **will** cause severe personal injury, death, or substantial property damage if the hazard is not avoided.*



Warning: *Warning is used to indicate the presence of a hazard that **can** cause severe personal injury, death, or substantial property damage if the hazard is not avoided.*



Caution: *Caution is used to indicate the presence of a hazard that **will** or **can** cause minor personal injury or property damage if the hazard is not avoided.*

GENERAL SAFETY PRECAUTIONS



Danger: *Infrared radiation is invisible and can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not look directly into the optical adapters of the adapter packs. Exposure to invisible laser radiation may result. An optical power meter should be used to verify active fibers. A protective cap or hood **MUST** be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of dangerous amounts of radiation exposure. This practice also prevents dirt particles from entering the adapter or connector.*

1 PRODUCT DESCRIPTION

The CommScope Fiber Management Tray (FMT) is a rack-mount, front-access fiber optic tray available in a variety configurations. Some of these are noted below:

- 12- or 16-position termination and storage (universal storage);
- 24-position termination and storage (left or right storage);
- 12-position termination and splice (left or right splice entry);
- 32-, 48-, or 60-cable bulk slack storage (capacity dependent on cable diameter).

Rack-mount and recess options include:

- EIA or WECO, reversible 19- or 23-inch (48.26 or 58.42 cm) mounting brackets installed for 5-inch recess;
- ETSI, 20.28-inch (51.5 cm) with 40 mm recess.

Customer adjustable recess configurations include:

- EIA 19-inch (48.26 cm) with 40 mm recess;
- EIA or WECO, 19 or 23-inch (48.26 or 58.42 cm) FMT offer 2.2-inch (5.59 cm), 3.1-inch (7.9 cm), 5-inch (12.7 cm), or 6.5-inch (16.5 cm) recess;

Figure 1 shows one of the FMT configurations, the 12-position termination and storage tray. Some of the features common to all FMT configurations are displayed.

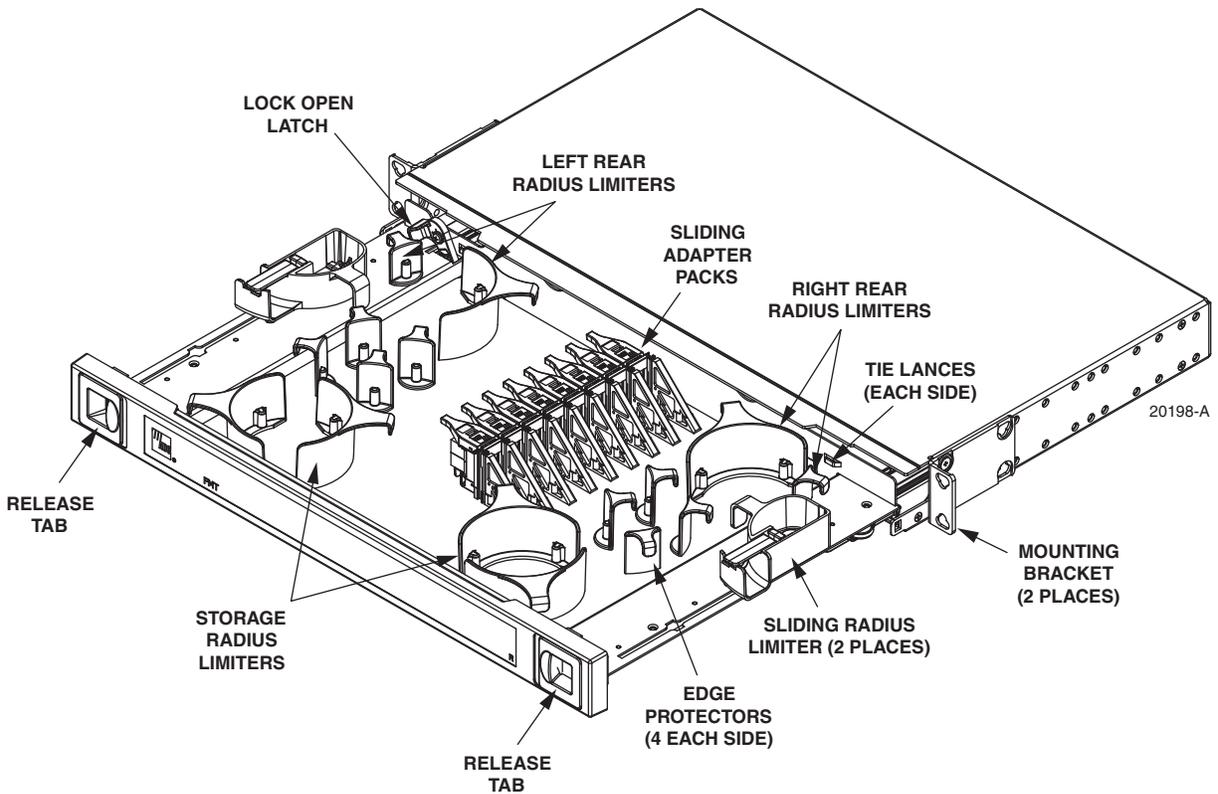


Figure 1. FMT Features (12-Position Termination and Storage Tray, Universal Entry, Shown)

The features shown include the following (from bottom left clockwise):

- **Edge Protectors**—Protect cables from sharp angles at bend points.
- **Release Tabs**—Allows the FMT tray to open.
- **Lock Open Latch**—Allows the technician to lock open the FMT while working in the tray.
- **Rear Radius Limiters (Left and Right)**—Maintain a protective, minimum-bend radius for cables routed into panel.
- **Tie Lances**—Provide anchor points for securing fibers.
- **Storage Radius Limiters**—Provide service loop storage for cable terminated in panel.
- **Mounting Brackets**—Adapt the tray for the different mounting options. Brackets may be mounted in several recess locations based on customer needs.
- **Sliding Radius Limiter**—Provides protective entry point for cables. Radius limiter slides backward when tray is pulled out and forward when tray is closed.

- **Sliding Adapters Packs**—Each with two adapters, provide easy access for connecting cables and cleaning connectors. Product offerings for adapters/connectors include most industry-standard multimode and singlemode types.

Figure 2 shows a closed tray with the sliding radius limiter in a closed position. Also shown is the optional lock.

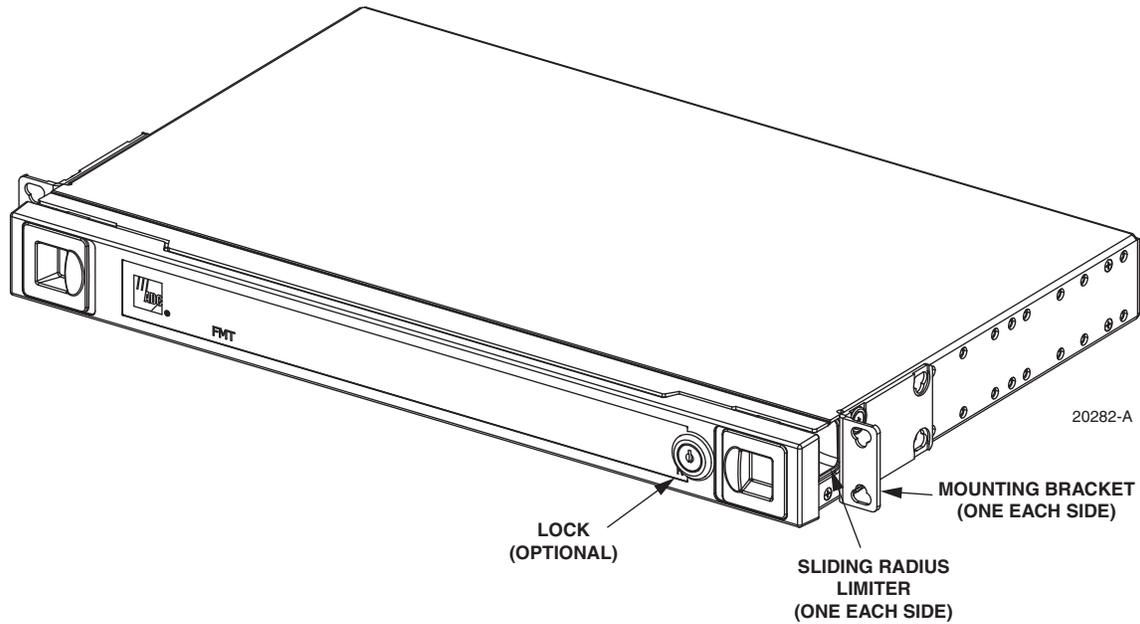


Figure 2. FMT Features (Closed Tray Shown)

2 SPECIFICATIONS

Table 1 lists specifications for the Fiber Management Tray. Figure 3 shows the FMT dimensions for rack type, rack width, and recess options.

Table 1. Fiber Management Tray Specifications

ITEM	DESCRIPTION
Dimensions (H × W × D)	See Figure 3 on page 6.
Approximate Weight	7.9 lbs. (3.98 Kg)
Configuration Options and Capacity	Termination/storage (12, 16, or 24 terminations) Bulk storage 3 mm O.D. cable: 32 cables, length 1.7 m (66 in.) each 2 mm O.D. cable: 48 cables, length 3.4 m each (132 in.) 1.7 mm O.D. cable: 60 cables, length 3.9 m (154 in.) each Termination and splice (12 splices)

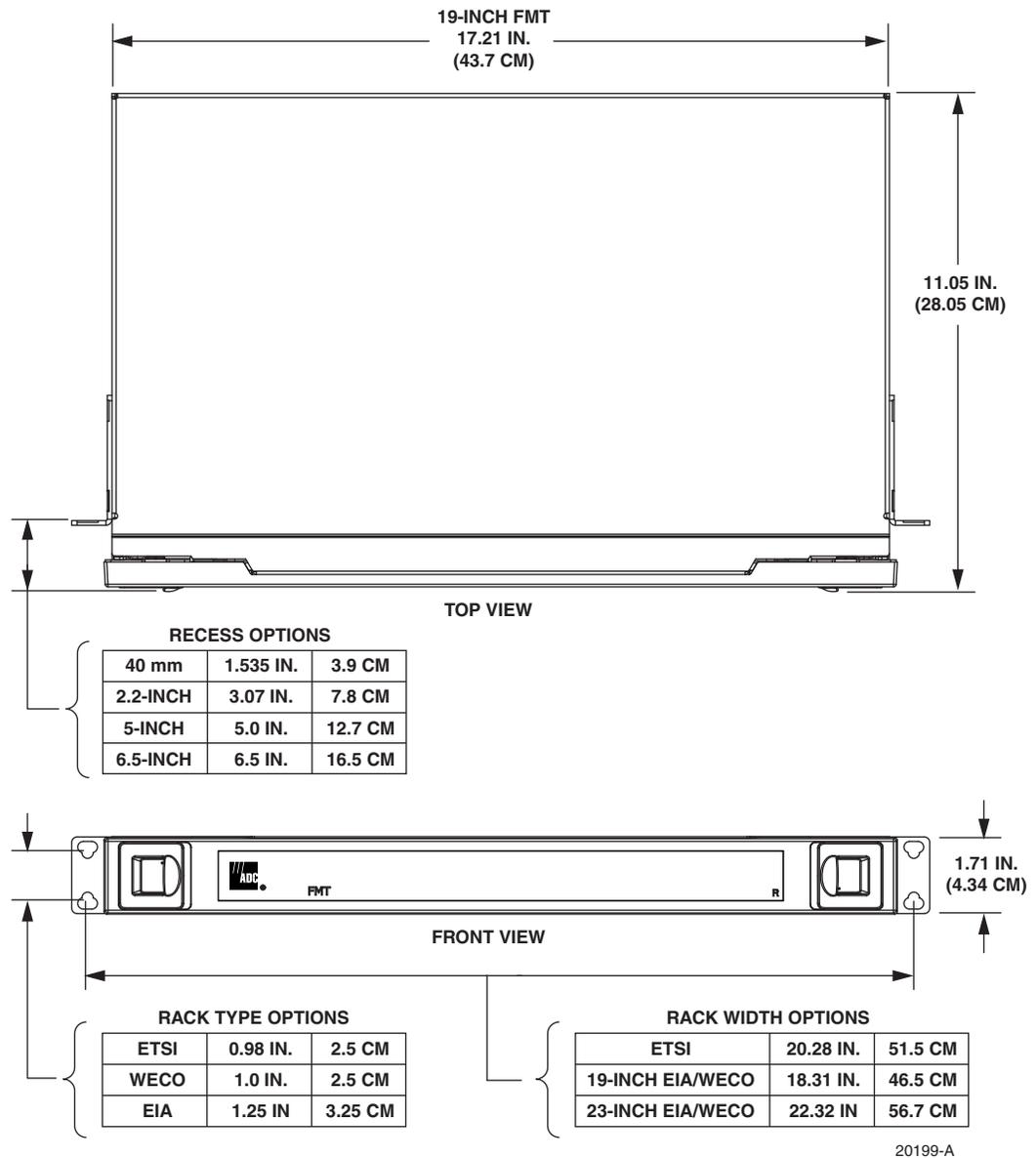


Figure 3. FMT Dimensions

3 UNPACKING THE PRODUCT

Unpack and inspect the Fiber Management Tray as follows:

1. Inspect the exterior of the shipping container for evidence of rough handling that may have damaged the contents of the container.
2. Unpack the FMT and check for possible damage.

3. If damage is detected or if parts are missing, file a claim with the commercial carrier and then notify CommScope Customer Service. Save damaged carton for inspection by the carrier.
4. Refer to [Section 8 Customer Information and Assistance](#) for repair, replacement, and warranty information.
5. Save the shipping container for use if equipment requires shipment at a future date.

4 MOUNTING THE FMT ON THE RACK

For all mounting options, the FMT uses two mounting brackets, one on either side, with two mounting holes in each bracket (see [Figure 4](#)). Determine what recess is required and adjust mounting brackets for the required recess. Secure tray to rack using the screws (provided).

- **Note:** In some configurations, the same screw is used for both the mounting bracket (top hole) and the vertical cable guide (see [Section 5 Installing Vertical Cable Guides](#)).

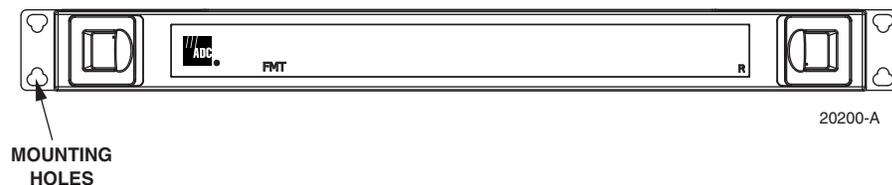


Figure 4. FMT Mounting Holes

5 INSTALLING VERTICAL CABLE GUIDES

Optional vertical cable guides (VCGs) may be installed with FMTs when space permits. [Table 2](#) summarizes possible uses of VCGs for various combinations of rack width and recess.

Table 2. Possible Uses of VCGs

RACK WIDTH	RECESS	VERTICAL CABLE GUIDE
19 inches (48.26 cm)	40 mm (1.54 inch)	VCGs not advised
	2.2-inch (5.59 cm)	
	3.1-inch (7.9 cm) 5-inch (12.7 cm) 6.5-inch (16.5 cm)	Figure 5
23 inches (58.42 cm)	40 mm (1.54 inch)	Figure 6
	2.2-inch (5.59 cm)	
	3.1-inch (7.9 cm)	
	5-inch (12.7 cm)	
	6.5-inch (16.5 cm)	

1. If the rack width is 19 inches (48.26 cm) or ETSI (20.28 inches, 51.5 cm) and:

- a. Recess is 40 mm (1.54 inch) or 2.2-inch (5.59 cm), use of VCGs is not advised.
- b. Recess is 3.1-inch (7.9 cm), 5-inch (12.7 cm), or 6.5-inch (16.5 cm), mount the VCGs on the rack narrow flange using the same screw and hole position as used for the top mounting screw on the panel mounting bracket. Refer to [Figure 5](#).

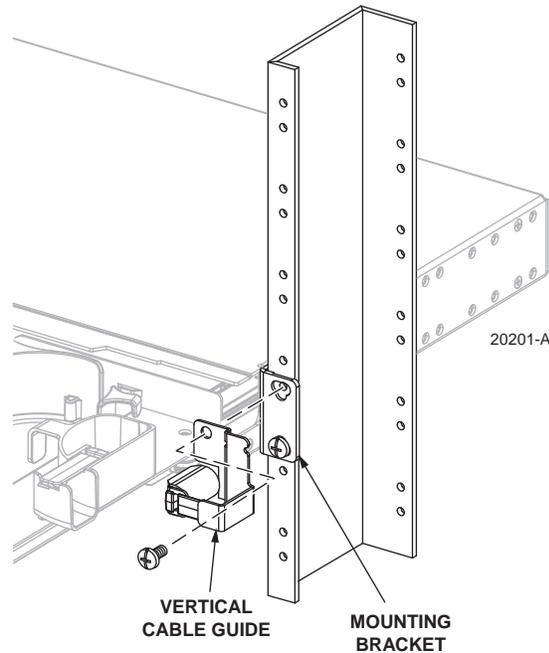


Figure 5. Installing VCGs (19-Inch Rack Mount)

2. If the rack width is 23 inches (58.42 cm), mount the VCGs on the rack narrow flange using the same screw and hole position as used for the top mounting screw on the panel mounting bracket. Refer to [Figure 6](#).

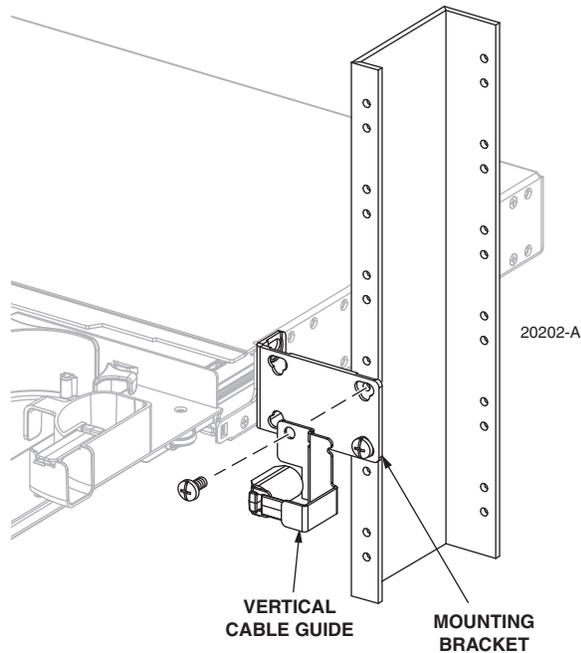


Figure 6. Installing VCGs (23-Inch Rack Mount)

6 INSTALLING AND ROUTING CABLES

⚠ Danger: *Infrared radiation is invisible and can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not look directly into the optical adapters of the adapter packs. Exposure to invisible laser radiation may result. An optical power meter should be used to verify active fibers. A protective cap or hood MUST be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of dangerous amounts of radiation exposure. This practice also prevents dirt particles from entering the adapter or connector.*

⚠ Caution: *Placing a load in excess of 5 pounds (2.3 kg) onto an open tray will result in misalignment or damage to the tray.*

6.1 Routing and Securing Cables

The FMT may be configured to provide termination and storage, storage only, or termination and splice functions. For each configuration, the fiber optic cables or patch cords are routed to the FMT, installed within the sliding tray, and secured.

All cables enter the FMT through one of the two sliding entry points, located on the left and right sides of the FMT. When properly installed, the slack loop that forms when the FMT is closed is taken up within the FMT by movement of the sliding radius limiter.

[Figure 7](#) and [Figure 8](#) show typical cable routing. Prior to routing cables, review the installation procedure corresponding to the configuration (provided in [Subsection 6.3](#) through [Section 6.6](#)). Then use the following guidelines for routing and installing the cables or patch cords:

1. Open the tray fully, the lock open latch will lock the tray in the open position (see [Subsection 7.1](#)).
 2. Route the cables to the FMT. The cables may be routed from either overhead or under the floor and to the left or right side of the FMT depending on configuration requirements.
 3. Secure the cable on the rack using a cable clamp such as shown in [Figure 7](#) and [Figure 8](#).
- ▶ **Note:** Install the cable clamp kit following the instructions provided in the installation drawing shipped with the kit. Ribbon blocking kits are available from CommScope in a variety of sizes to match any ribbon cable type.
4. Route the cables into the FMT through the specified sliding radius limiter(s).
 5. Route and connect the cables within the FMT as required by the configuration. Refer to the installation procedure that corresponds to the FMT configuration.
 6. Adjust the cables within the FMT until all excess slack is removed or stored.
 7. Secure the cables to the back of the FMT at the rear tie-off point (see [Figure 7](#) and [Figure 8](#)). Note that a tie-off point is provided on both the left and right side.
 8. Use the curly locks provided to bundle fibers together between the sliding radius limiter and the rear radius limiter as needed.
 9. Adjust the cable position with the cable clamp as required to remove excess slack.
 10. Release the lock open latch and close the tray (see [Subsection 7.4](#)).

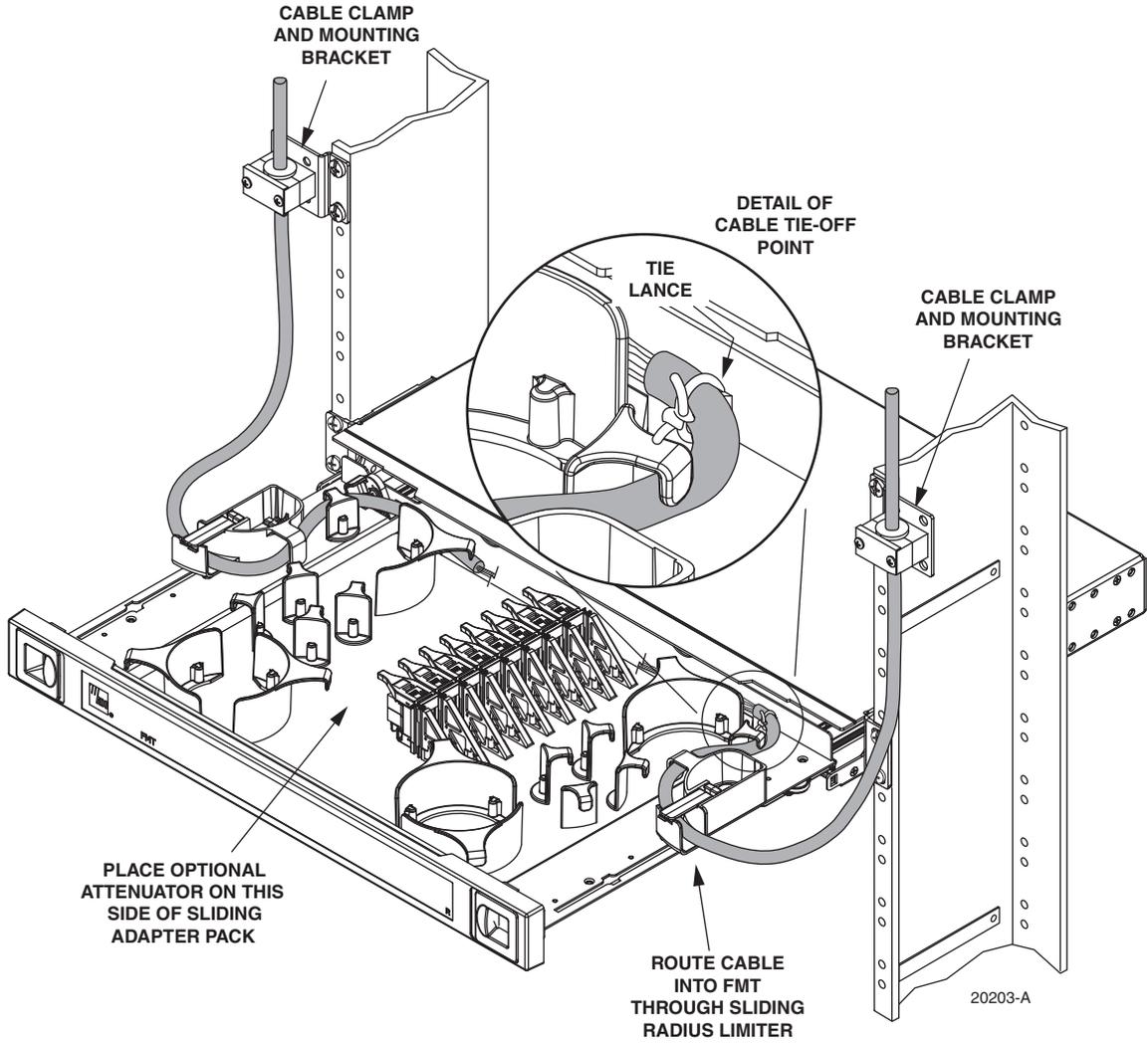


Figure 7. Routing and Securing Cable - Typical Configuration for IFC Stranded Cable

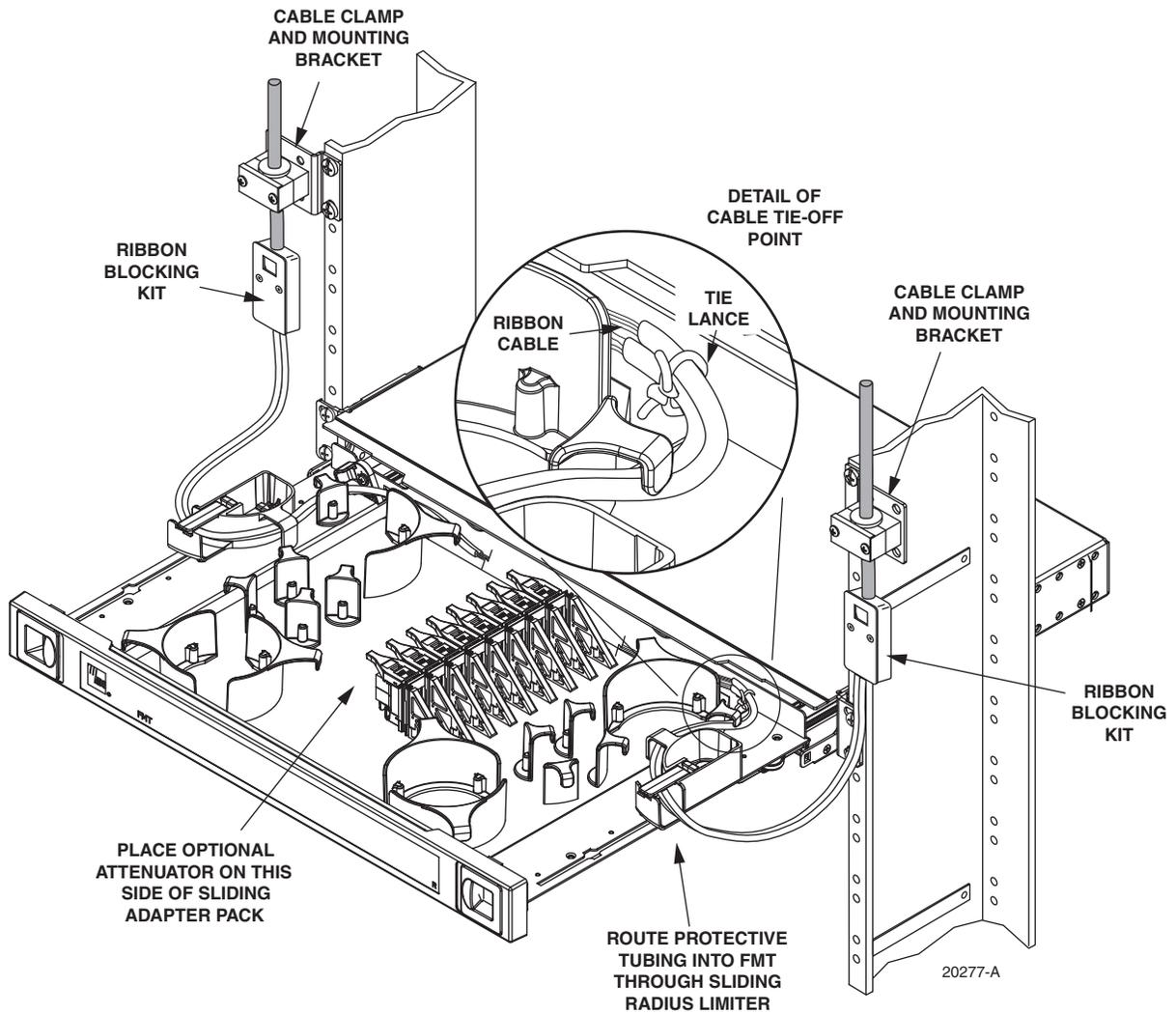


Figure 8. Routing and Securing Cable - Typical Configuration for Ribbon Cable

6.2 Attenuators

Attenuators decrease the optical power in a fiber by a specific or adjustable amount. Once the desired level of attenuation is determined, fixed attenuators may be inserted in the fiber optic line to deliver a precise output. Optional attenuators are installed on tab side of the sliding adapter packs. See [Figure 7](#).

6.3 Termination Only FMT Configuration

Cables routed into the FMT for termination only will typically be pre-terminated individual cables of 2 mm or 3 mm diameter. Refer to the following instructions.

6.3.1 24-Position Termination Only Tray, Universal Entry

Route and install the cables as shown in [Figure 9](#). Place kurly locks at locations indicated.

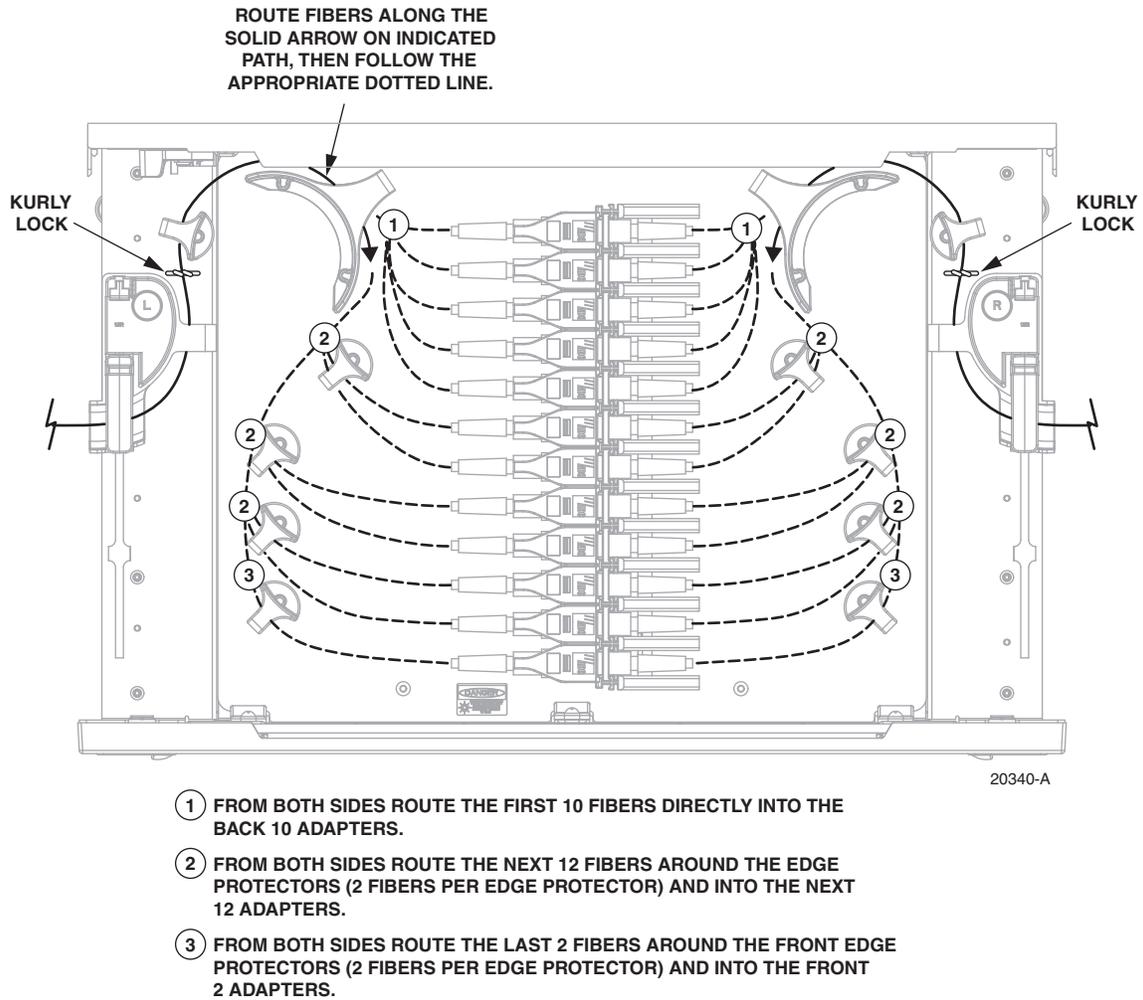
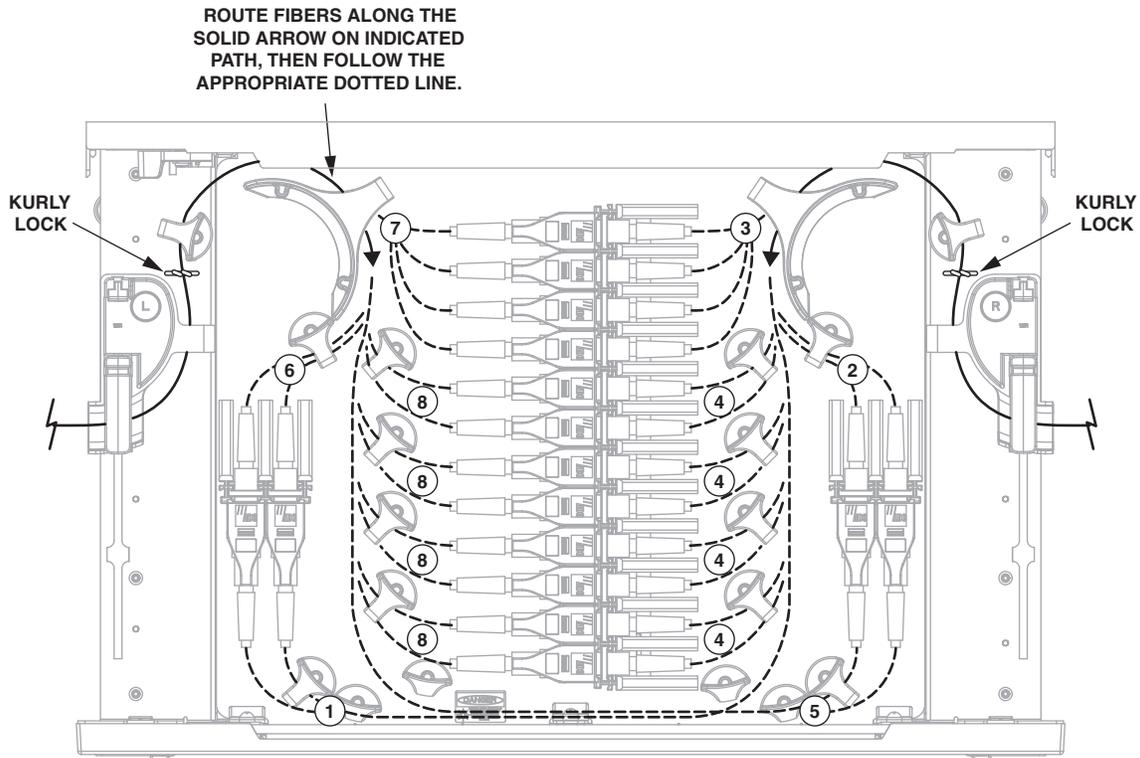


Figure 9. Cable Routing for 24-Position Termination Only Tray, Universal Entry

6.3.2 32-Position Termination Only Tray, Universal Entry

Route and install the cables as shown in Figure 10. Place kurlly locks at locations indicated.



- ① ROUTE THE FIRST 2 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE FRONT RIGHT CORNER OF THE ADAPTERS (EDGE PROTECTOR). CONTINUE ROUTING FIBERS ACROSS THE FRONT OF THE TRAY AROUND THE EDGE PROTECTORS TO THE 2 ADAPTERS ON THE LEFT SIDE.
- ② ROUTE THE NEXT 2 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER TO THE 2 ADAPTERS ON THE RIGHT SIDE.
- ③ ROUTE THE NEXT 8 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER TO THE TOP 8 ADAPTERS ON THE RIGHT SIDE.
- ④ ROUTE THE NEXT 16 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER TO THE EDGE PROTECTORS. ROUTE 4 FIBERS AROUND EACH EDGE PROTECTOR TO 4 ADAPTERS ON THE RIGHT SIDE.
- ⑤ ROUTE THE FIRST 2 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITER, AND AROUND THE FRONT LEFT CORNER OF THE ADAPTERS (EDGE PROTECTOR). CONTINUE ROUTING FIBERS ACROSS THE FRONT OF THE TRAY AROUND THE EDGE PROTECTORS TO THE 2 ADAPTERS ON THE RIGHT SIDE.
- ⑥ ROUTE THE NEXT 2 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITER TO THE 2 ADAPTERS ON THE LEFT SIDE.
- ⑦ ROUTE THE NEXT 8 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITER TO THE TOP 8 ADAPTERS ON THE LEFT SIDE.
- ⑧ ROUTE THE NEXT 16 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITER TO THE EDGE PROTECTORS. ROUTE 4 FIBERS AROUND EACH EDGE PROTECTOR TO 4 ADAPTERS ON THE LEFT SIDE.

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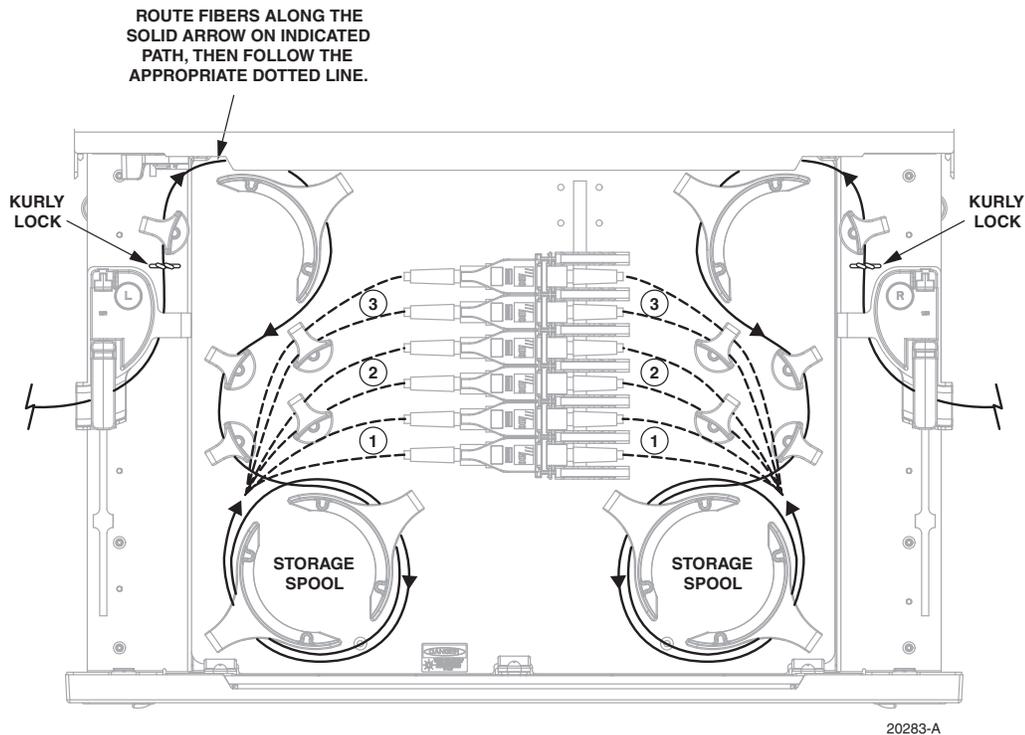
Figure 10. Cable Routing for 32-Position Termination Only Tray, Universal

6.4 Termination and Storage FMT Configuration

Cables routed into the FMT for termination and storage will typically be pre-terminated individual cables of 2 mm or 3 mm outside diameter. For instructions on routing the cables within the tray, select from the subsections below based on the tray configuration being installed.

6.4.1 12-Position Termination and Storage Tray, Universal Storage

Route and install the cables as shown in [Figure 11](#). Place kurly locks at locations indicated.

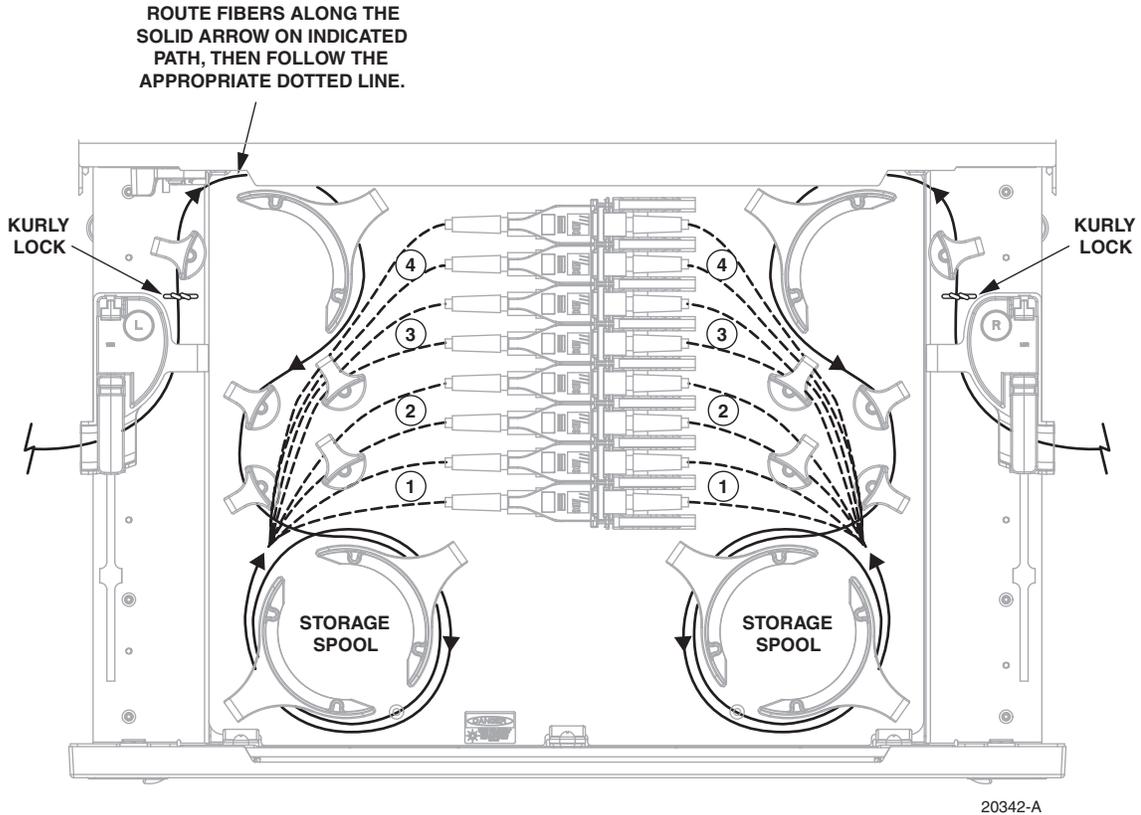


- ① ROUTE THE FIRST 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE TO THE FRONT 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ② ROUTE THE NEXT 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE AROUND THE SINGLE RADIUS LIMITER TO THE NEXT 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ③ ROUTE THE LAST 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE AROUND THE SINGLE RADIUS LIMITER TO THE LAST 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ④ REPEAT THE PROCESS FOR THE LEFT SIDE, WRAPING THE FIBERS CLOCKWISE AROUND THE STORAGE SPOOLS.

Figure 11. Cable Routing for 12-Position Termination and Storage Tray, Universal Storage

6.4.2 16-Position Termination and Storage Tray, Universal Storage

Route and install the cables as shown in Figure 12. Place kurly locks at locations indicated.

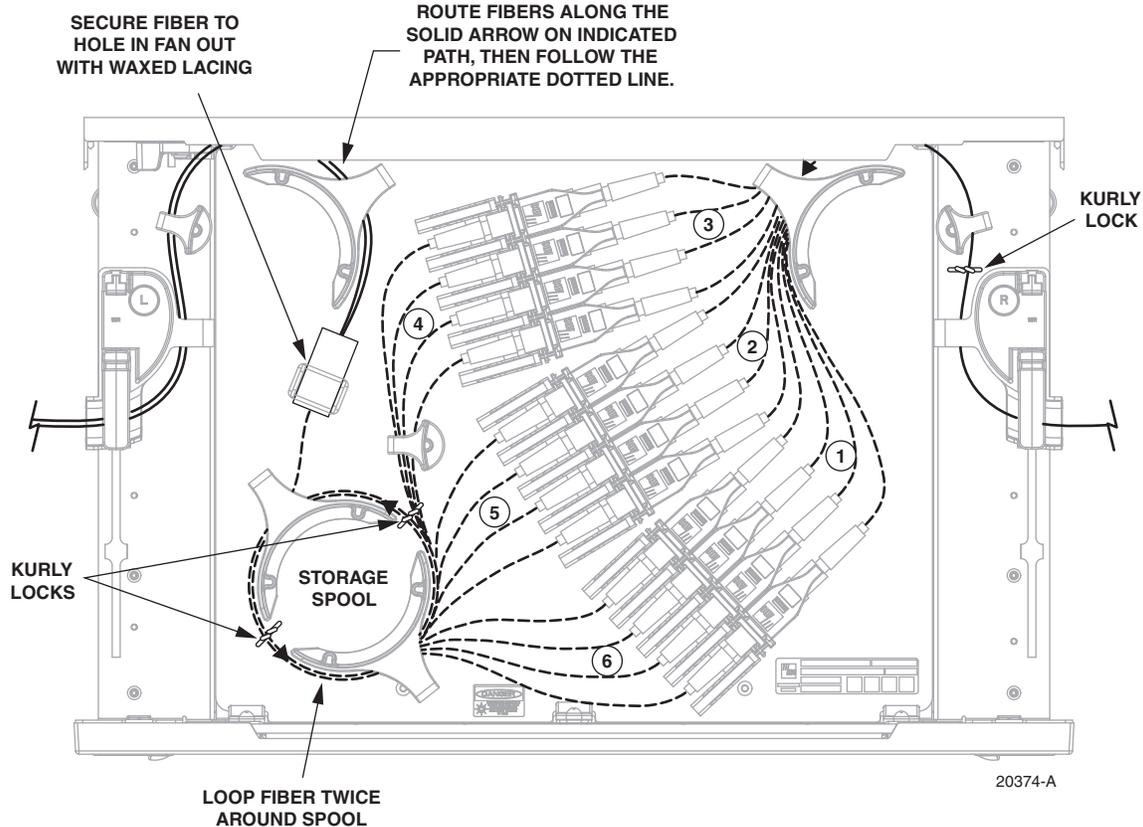


- ① ROUTE THE FIRST 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE TO THE FRONT 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ② ROUTE THE NEXT 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE AROUND THE SINGLE RADIUS LIMITER TO THE NEXT 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ③ ROUTE THE NEXT 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE AROUND THE SINGLE RADIUS LIMITER TO THE NEXT 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ④ ROUTE THE LAST 4 FIBERS THROUGH THE RIGHT SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITER, AND AROUND THE 2 FAR RIGHT RADIUS LIMITERS. WRAP FIBERS COUNTER CLOCKWISE AROUND THE RIGHT FRONT STORAGE SPOOLS AND ROUTE AROUND THE SINGLE RADIUS LIMITER TO THE LAST 4 ADAPTERS ON THE RIGHT SIDE. WIND SLACK CABLE AROUND STORAGE SPOOLS IN THE DIRECTION SHOWN.
- ⑤ REPEAT THE PROCESS FOR THE LEFT SIDE, WRAPING THE FIBERS CLOCKWISE AROUND THE STORAGE SPOOLS.

Figure 12. Cable Routing for 16-Position Termination and Storage Tray, Universal Storage

6.4.3 24-Position Termination and Storage Tray, Left/Right Storage

Route and install the cables as shown in Figure 13. The figure shows a left-storage configuration with sliding adapter packs. For a right-entry storage, the routing is a mirror image of what is shown. Routing is the same for trays with bulkhead plate adapters (route left storage as shown below; route right storage as mirror image). Place kurly locks at locations indicated.



- ① ON THE RIGHT SIDE ROUTE THE FIRST 8 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITERS TO THE FRONT 8 ADAPTERS.
- ② ON THE RIGHT SIDE ROUTE THE NEXT 8 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITERS TO THE NEXT 8 ADAPTERS.
- ③ ON THE RIGHT SIDE ROUTE THE LAST 8 FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE RIGHT REAR RADIUS LIMITERS TO THE BACK 8 ADAPTERS.
- ④ ON THE LEFT SIDE ROUTE THE FIRST EIGHT FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITERS, AROUND THE STORAGE SPOOL TO THE BACK 8 ADAPTERS. WIND SLACK CABLE AROUND STORAGE SPOOL IN THE DIRECTION SHOWN.
- ⑤ ON THE LEFT SIDE ROUTE THE NEXT EIGHT FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITERS, AROUND THE STORAGE SPOOL TO THE NEXT 8 ADAPTERS. WIND SLACK CABLE AROUND STORAGE SPOOL IN THE DIRECTION SHOWN.
- ⑥ ON THE LEFT SIDE ROUTE THE LAST EIGHT FIBERS THROUGH THE SLIDING RADIUS LIMITER, AROUND THE LEFT REAR RADIUS LIMITERS, AROUND THE STORAGE SPOOL TO THE FRONT 8 ADAPTERS. WIND SLACK CABLE AROUND STORAGE SPOOL IN THE DIRECTION SHOWN.

Figure 13. Cable Routing for 24-Position Termination and Storage Tray, Left Storage

6.5 Bulk Storage Only FMT Configuration

► **Note:** The number and length of cables that can be stored in a bulk storage tray depends on the cable dimension (refer to [Table 1 on page 5](#)).

Route and install the cables as shown in [Figure 14](#). Place kurlly locks at locations indicated.

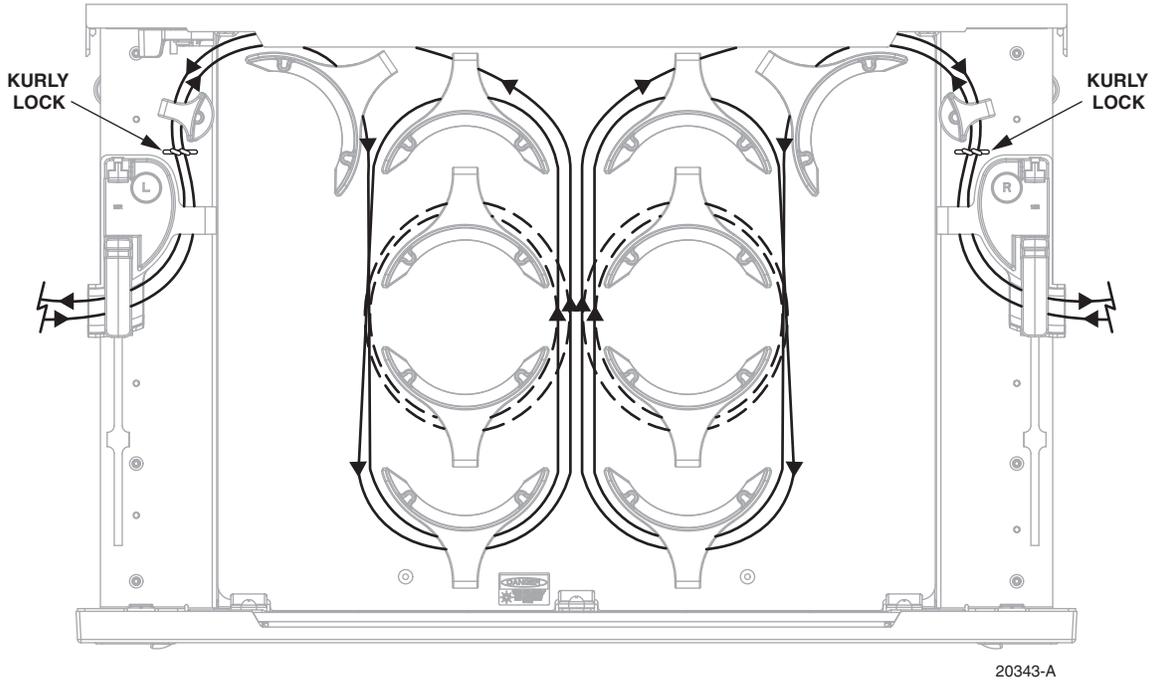


Figure 14. Cable Routing for Bulk Storage Tray

6.6 12-Position Termination and Splice Tray

► **Note:** Splicing instructions are not included. For splicing instructions, follow local practice.

Termination and splice trays provide 12 termination and splice positions. Install the cables for a 12-position termination and splice tray as follows:

1. Break out the cable corresponding to the dimensions provided in [Figure 15](#).
2. Route the cables into the tray as shown in [Figure 16](#), and perform the splices outside the tray at an adjacent work area, as shown. Perform the splices following local practice. Refer to pigtail installation drawing (provided with FMT) for pigtail connection scheme.
3. Loop the cables three times around the radius limiters as shown in [Figure 17](#).

► **Note:** Tie off the cable at the tie off point shown in [Figure 17](#), using a one-inch section of soft wall jacket per the breakout dimensions shown in [Figure 15](#).

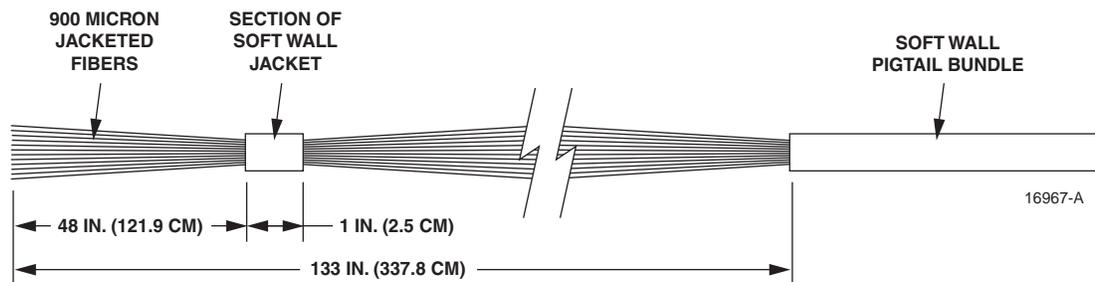


Figure 15. 12-Position Termination and Splice Tray Breakout Dimensions

4. Carefully position the tray within the splice area as shown in [Figure 18](#). Make certain that the pre-terminated and customer fiber bundles are properly routed around the appropriate radius limiters as they enter the FMT (see [Figure 18](#)).
5. Use the curly locks provided to bundle fibers together as needed. Place curly locks at locations indicated in [Figure 19](#).
6. Verify that the completed tray looks as shown (see [Figure 19](#)).

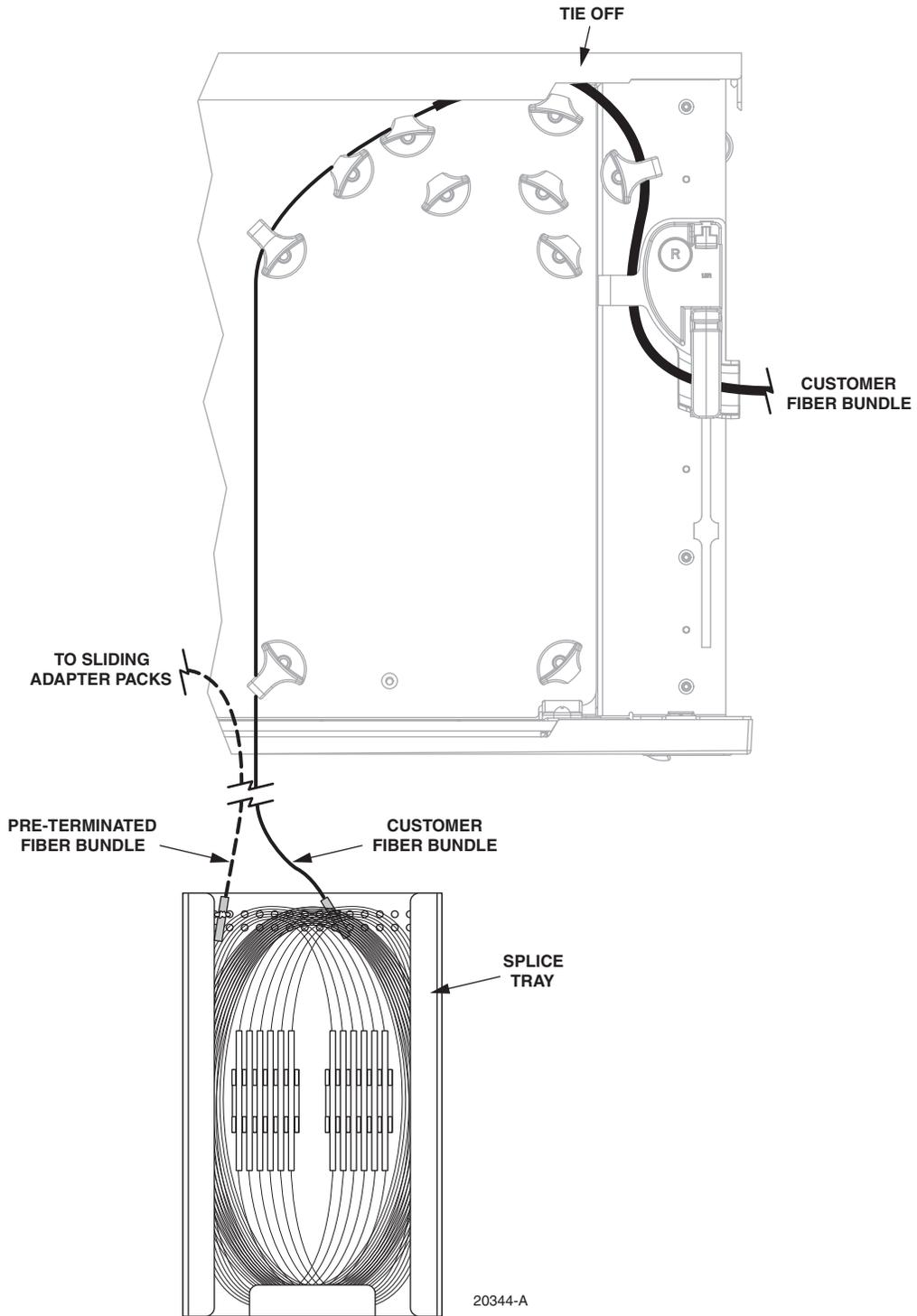


Figure 16. Cable Routing for 12-Position Termination and Splice Tray, Step 2

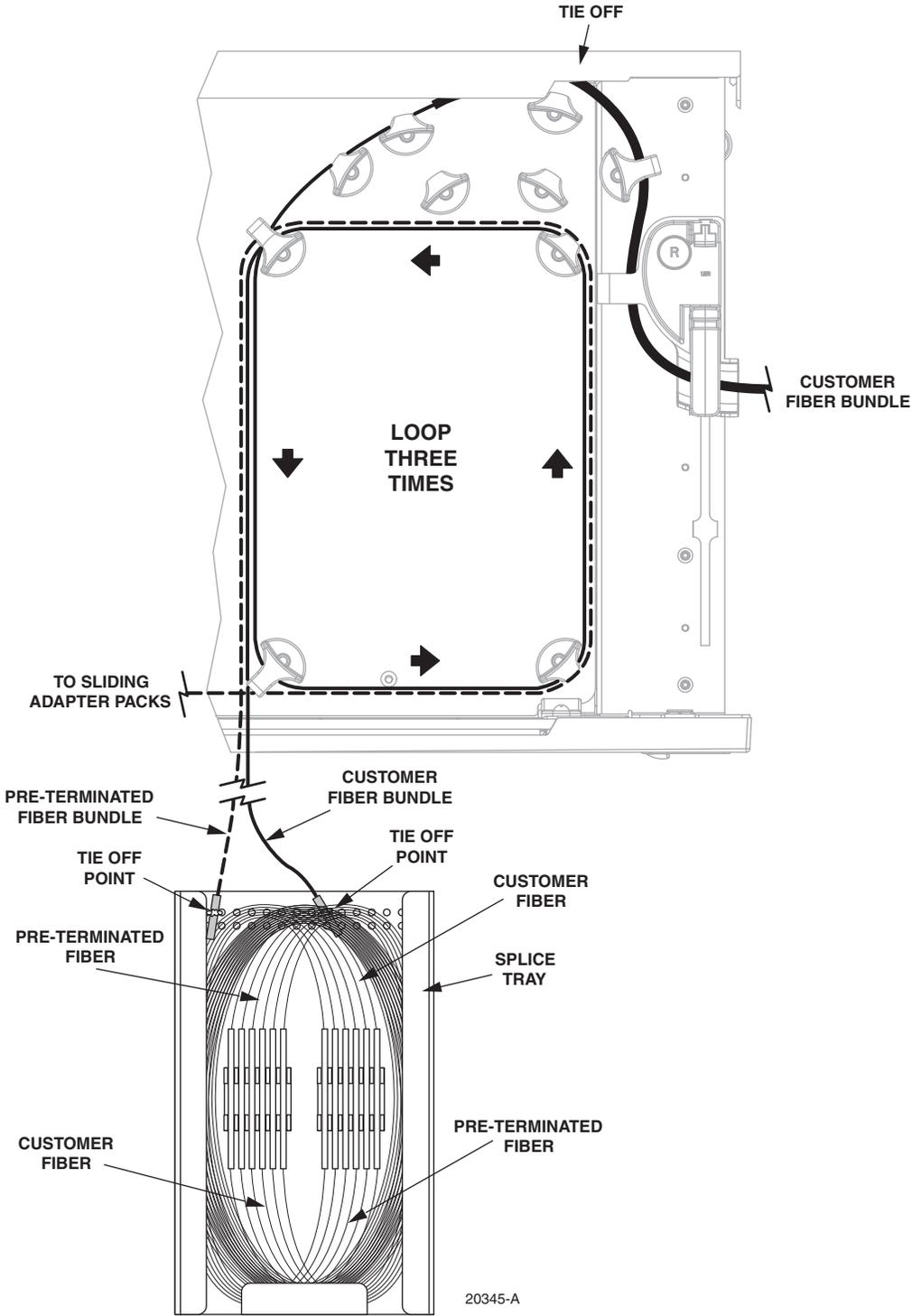


Figure 17. Cable Routing for 12-Position Termination and Splice Tray, Step 3

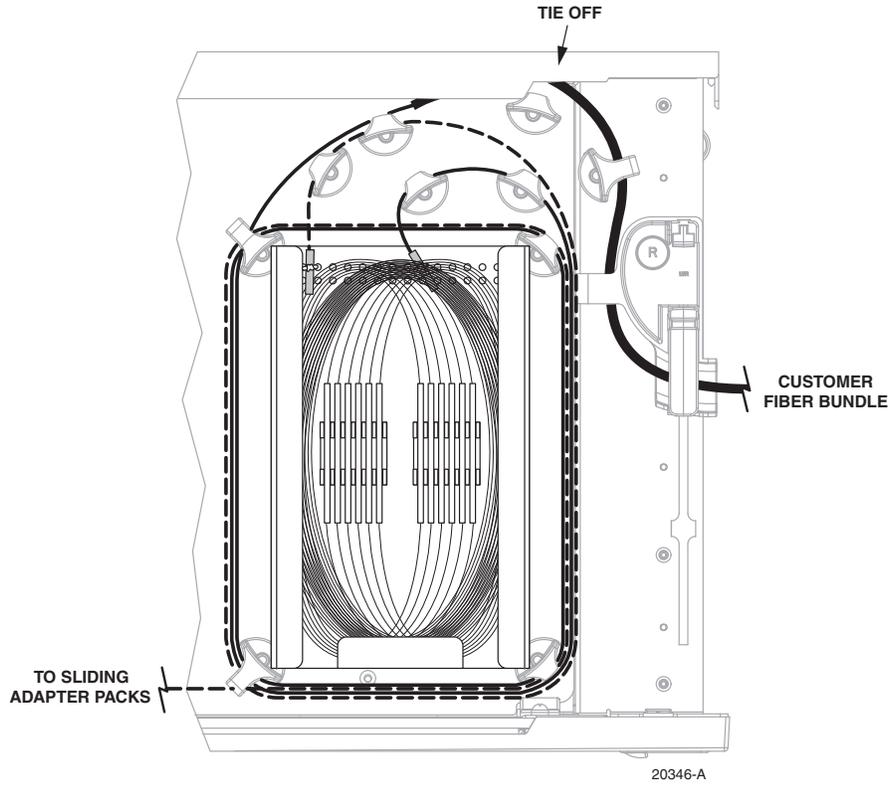


Figure 18. Cable Routing for 12 Termination and Splice Tray, Step 4

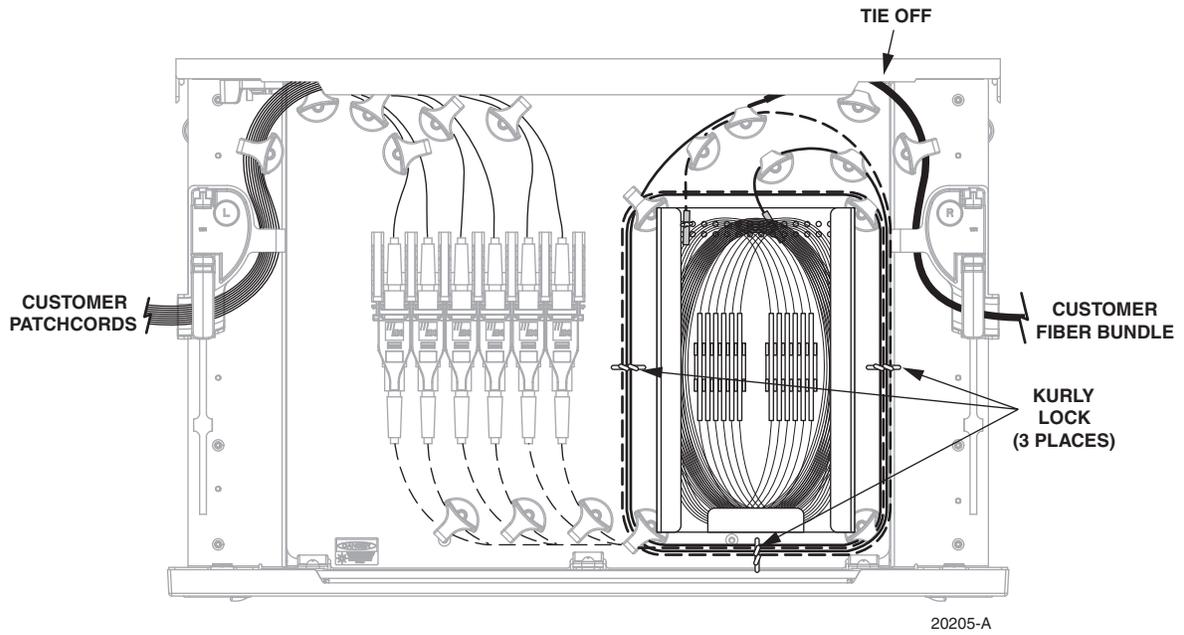


Figure 19. Completed Cable Routing for 12-Position Termination and Splice Tray

7 OPERATION

The term “operation” refers to procedures performed on an ongoing basis after the FMT is installed. The only FMT trays that require operation are those having a termination function. Patch cords may be installed in such trays for use in connecting or testing equipment. When routing patch cords, refer to the routing diagrams provided in [Section 6 Installing and Routing Cables](#). For instructions on accessing adapters, refer to the following instructions.

7.1 Opening Tray



Caution: *Placing a load in excess of 5 pounds (2.3 kg) onto an open tray will result in misalignment or damage to the tray.*

To open the FMT tray, slide the release tabs inward with both hands and pull the drawer straight out as far as it goes. The latch locks the tray in the open position as shown in [Figure 20](#).

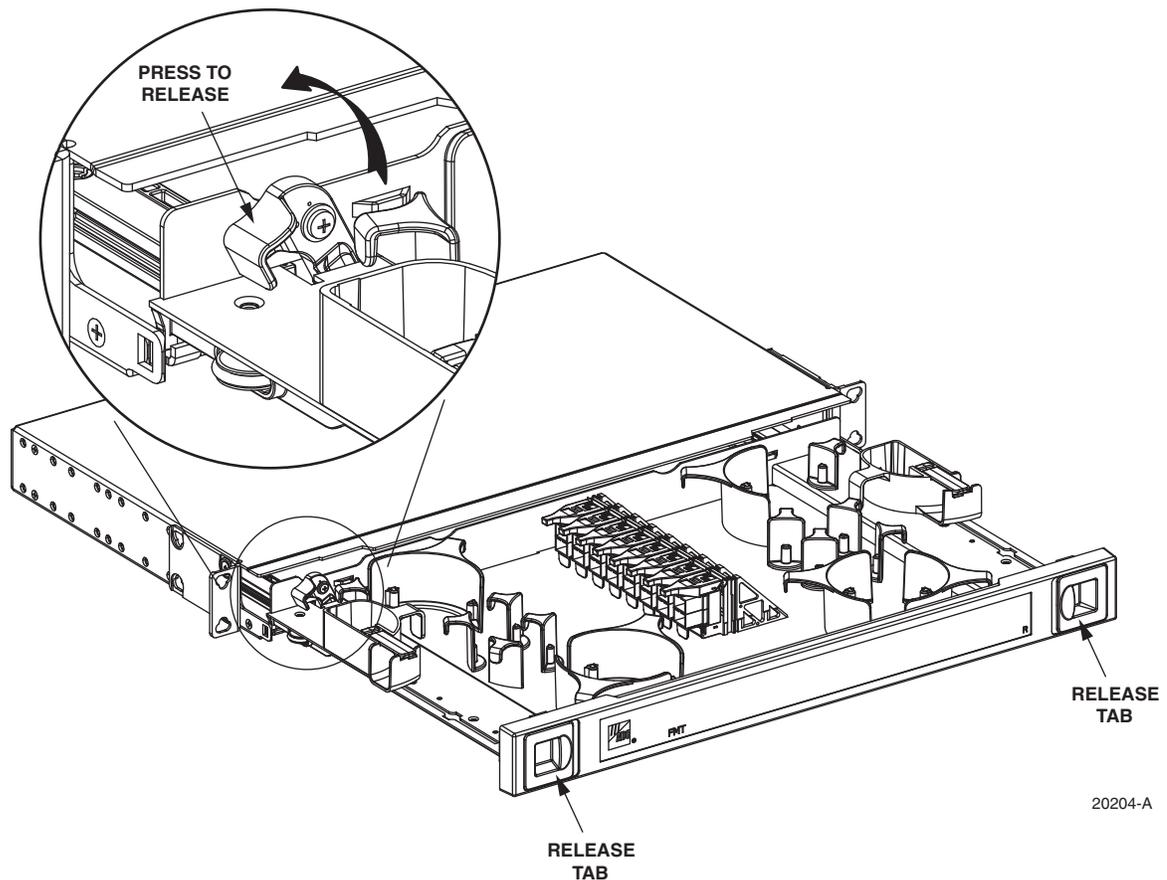


Figure 20. Tray Locked in Open Position

7.2 Accessing Sliding Adapter Packs



Danger: Infrared radiation is invisible and can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not look directly into the optical adapters of the adapter packs. Exposure to invisible laser radiation may result. An optical power meter should be used to verify active fibers. A protective cap or hood **MUST** be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of radiation exposure. This practice also prevents dirt particles from entering the adapter or connector.

► **Note:** Always inspect connectors and adapters when connecting connectors to adapters. For cleaning procedures, refer to ADCP-90-139.

To access a sliding adapter pack (Figure 21):

1. Route the patch cord into the tray as shown in the appropriate diagram in [Section 6 Installing and Routing Cables](#).
2. Lift up the release tab and slide up the adapter pack.

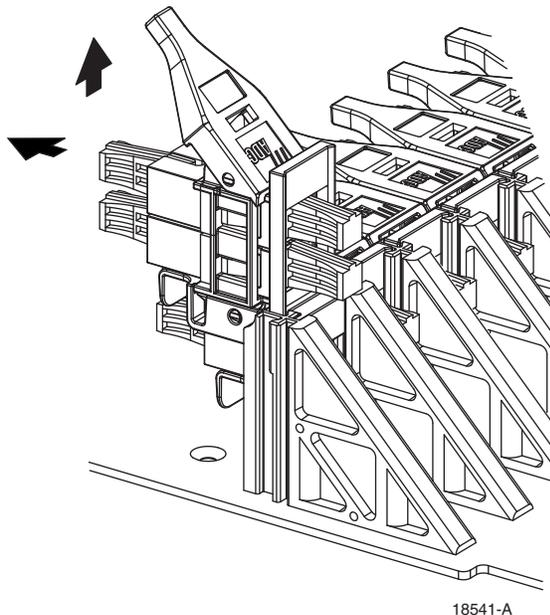


Figure 21. Removing Dust Cap From Sliding Adapter

3. Pull the dust cap straight out.
4. Connect the patch cord connector to the adapter.
5. Slide down the adapter back to its home position.
6. Close the tray.

7.3 Accessing Bulkhead Plate Adapters



Danger: *Infrared radiation is invisible and can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not look directly into the optical adapters of the adapter packs. Exposure to invisible laser radiation may result. An optical power meter should be used to verify active fibers. A protective cap or hood MUST be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of radiation exposure. This practice also prevents dirt particles from entering the adapter or connector.*

► **Note:** Always inspect connectors and adapters when connecting connectors to adapters. For cleaning procedures, refer to ADCP-90-139.

Use the following procedure to connect a patch cord to an FMT having bulkhead plate adapters:

1. Route the patch cord into the tray as shown in the appropriate diagram in [Section 6 Installing and Routing Cables](#).
2. Pull the dust cap straight out.
3. Connect the patch cord connector to the adapter.
4. Close the tray.

7.4 Closing the Tray

Close the tray using the following procedure:

1. If closing a tray with sliding adapter pack, fully lower and seat all adapter packs.
2. Assure that all cables and fibers are properly secured and located below the top surface of the tray.
3. Assure that all unused adapters are covered with dust caps.
4. Release the lock open latch (“unlocked position” shown in [Figure 20 on page 23](#)).
5. Slowly close tray, observing that no fiber kinks or microbends occur as a result of fiber routing.

8 CUSTOMER INFORMATION AND ASSISTANCE

For general product information, visit our website:

<http://www.commscope.com>

For technical assistance, contact the CommScope Support Center using the following URL:

<http://www.commscope.com/SupportCenter>

For information on patents, go to

<http://www.cs-pat>