Equipment Installation (Includes LaserWave™ Applications)

Preface

This instruction sheet covers the installation of the Fiber Optic 200A Interconnection Unit, which includes LaserWave Applications.

Contents:

General Notes

- For a cross-connection module arrangement, follow Steps 1 through 5.
- For an interconnection module arrangement, follow Steps 1, 4, 6, and 7.

Step 1 – Install Front Cover Decal

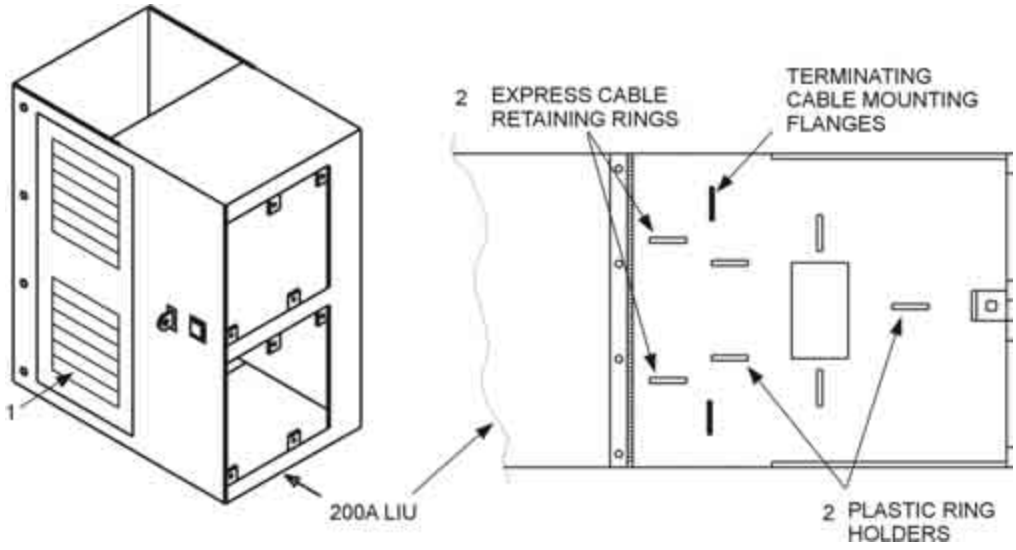

Figure 1. Install Front Cover Decal

1. On one 200A Lightguide Interconnection Unit (LIU), install the outside front cover decal.
2. Open the LIU door and snap the plastic ring holders into the positions shown, making sure the ring openings are to the outside.

Step 2 – Install 200A LIU, 2A4 or 2A8 Trough and 2A6 Trough

NOTE:
2A4, 2A8 and 2A6 troughs must be ordered separately.

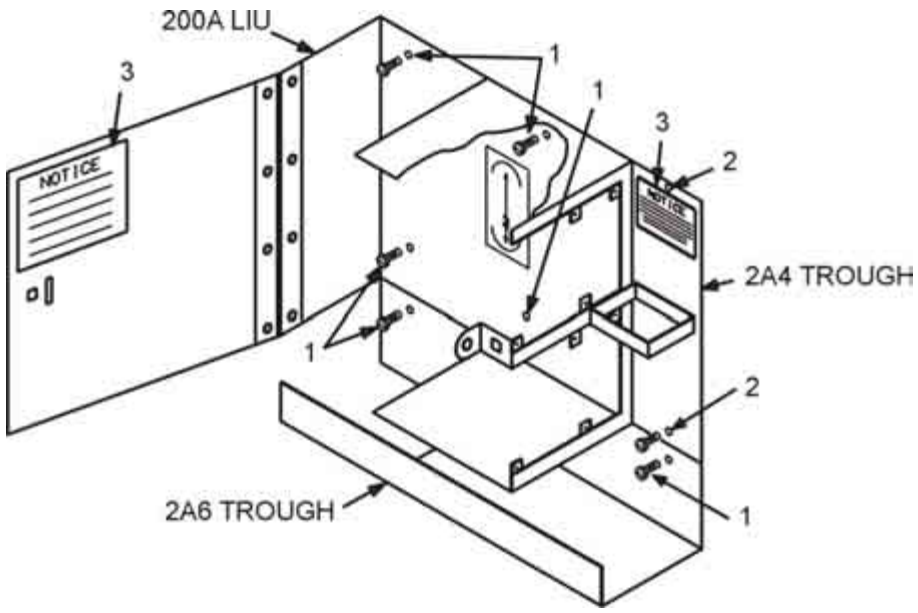

Figure 2. Trough Installation

1. Each 200A LIU is provided with four sheetmetal/wood screws for mounting the module to a backboard. A 2A6 trough is mounted below the bottom module in each column of modules (see Figure 4 for illustration). Two sheetmetal/wood screws are provided with the 2A6 trough.
2. The 2A4 or 2A8 troughs are installed next to each 200A LIU, using the two sheetmetal/wood screws provided with the troughs. The above illustration shows the installation of a 2A4 trough. The vertical 2A8 trough has a cover which can be locked.
3. Install notice decal in location shown.

Step 3 – Reserve Space Allocation

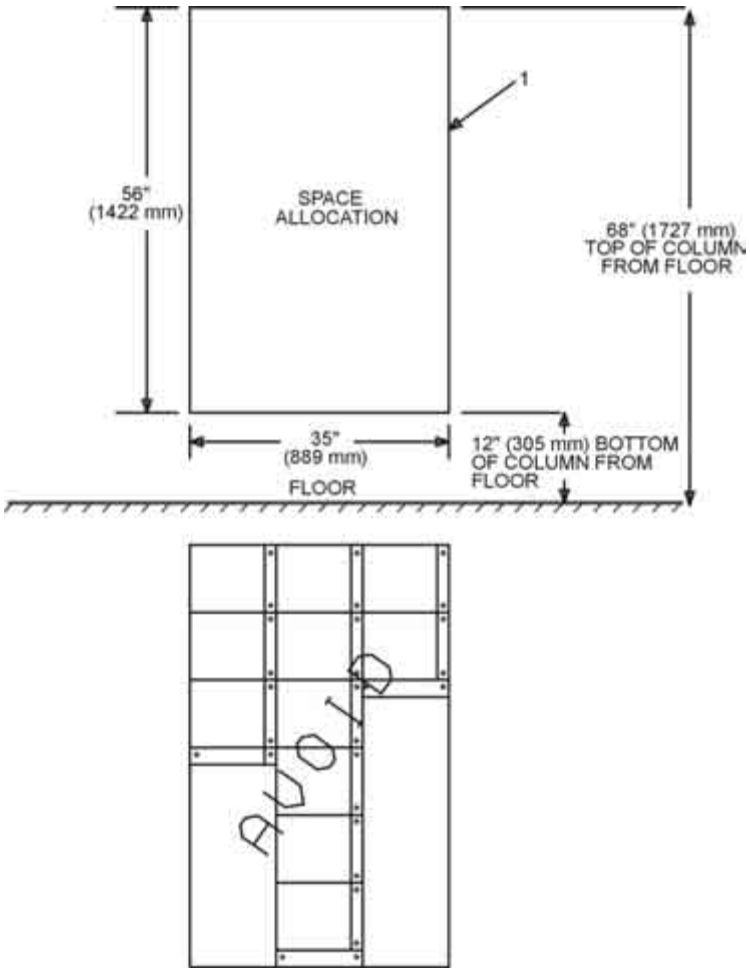

Figure 3. Space Allocation

NOTE:

The type of growth sequence shown above is not recommended and must be avoided. The 2A6 trough must be aligned with other 2A6 troughs at the bottom of each column.

1. Reserve space allocation in the mounting area to allow for future growth. For example, with the space allocation shown above, cross-connection modules may be stacked to a column of 6 modules high and 3 columns wide with the top of the uppermost module placed not more than 68 inches (1727 mm) from the floor. The ultimate space allocation for a cross-connection field of 12 columns wide and 6 modules per column is 56 inches (1422 mm) high by 11 feet 8-3/4 inches (3.6 m) wide.

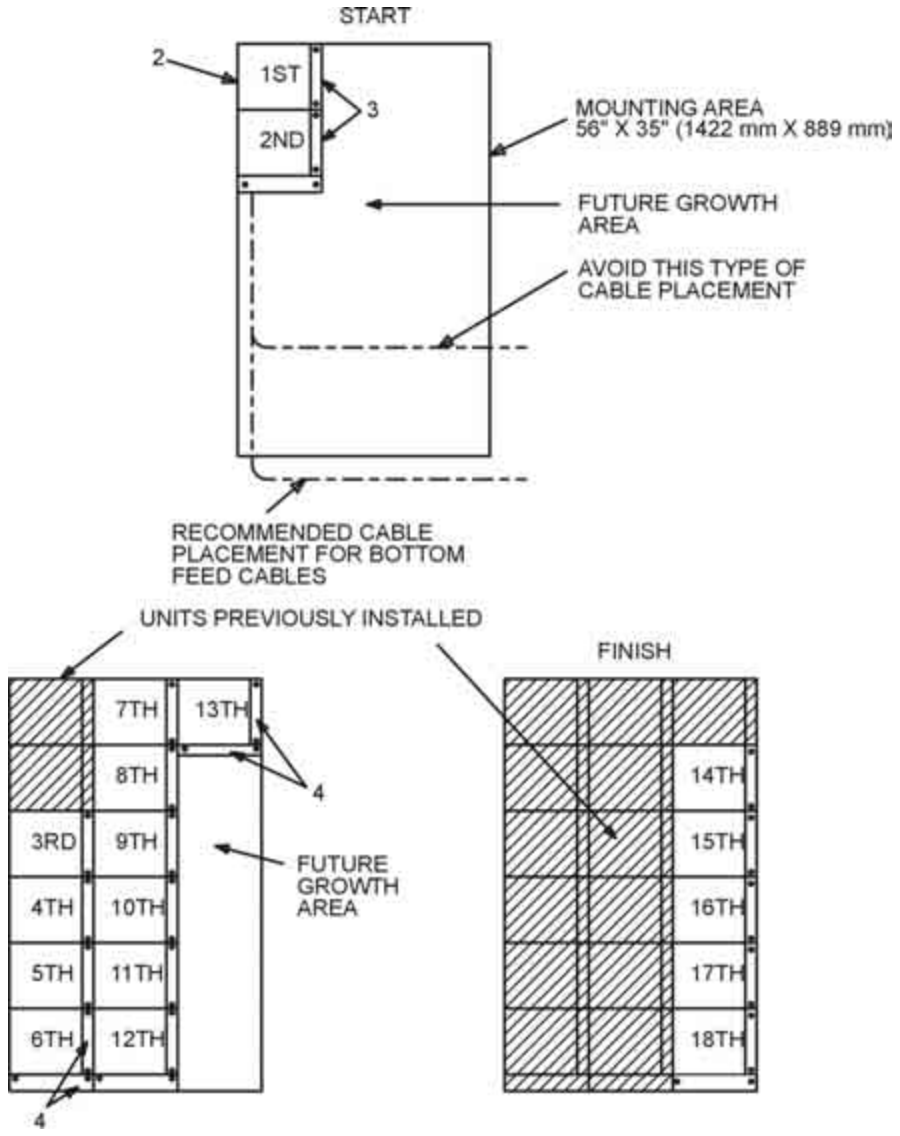

Figure 4. LIU Installation to a Backboard or Wall

2. Mount the first 200A LIU in the upper-left portion of the reserved space.
3. Mount a 2A4 or 2A8 trough next to the 200A LIUs, aligning them so that no space is wasted.
4. Finish up each column with 2A4 or 2A8 troughs and 2A6 troughs as shown in the figure above, regardless of having less than 6 modules per column.
5. Leave a 1/4-inch (6 mm) space between columns to allow for adjacent hinges.

Step 4 – Prepare Fiber Optic Cable

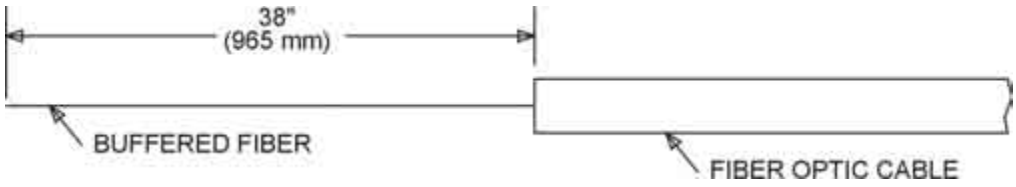

Figure 5. Preparing Fiber Optic Cables

1. Prepare the fiber optic cable as shown.
2. Install the appropriate connectors on the buffered fibers for the type of coupling panel and couplings to be used.

Coupling Panels, Couplings, and Connectors

Table 1. Coupling Panels, Couplings, and Cable Connectors

Coupling Panels	Couplings	Cable Connectors
10A	C-2000A & C ***ST***® Series Coupling	P-2000A & C ***ST*** Series
10A	C-3000A ***ST*** Series Coupling	P-3000A ***ST*** Series
10A	SM & MM ***ST*** Coupling/Buildout Attenuators	P-2000A & C ***ST*** Series & P-3000A ***ST*** Series
11A	1007A Data Link Coupling	1005B Biconic
12A	401-,501-, 601-, and 701-Series Buildout	1006A Biconic
10SC1	C6000A-4 SC Coupling	P2424 MM SC Simplex & P3424 SM SC Simplex
F86AK8612	Blank Panel - No Coupling	None
F86AK8557	SMA Coupling	SMA Connector
F87AK8657	IBM ESCON Coupling	IBM ESCON Connector
F87AK8574	FC/D4 Coupling	FC/D4 Connector
F89AK8554	FDDI Coupling	FDDI Connector

Table 2. Coupling Panels and Couplings for LaserWave Applications

Coupling Panels	Couplings (included with Panels)	COMCODE
PNL 100/200 EW MM/C12LC AQUA	MM LC 12-PACK-GANGED	109 171 900
PNL 100/200 EW MM/C6SC AQUA	MM SC 6-PACK-GANGED	109 171 918
PNL 100/200 EW MM/C6ST AQUA	MM ST 6-PACK-GANGED	109 171 926
PNL 100/200 EW MM/C12LC BEIGE	MM LC 12-PACK-GANGED	109 171 843
PNL 100/200 EW MM/C6SC BEIGE	MM SC 6-PACK-GANGED	109 171 850
PNL 100/200 EW MM/C6ST BEIGE	MM ST 6-PACK-GANGED	109 171 868
PNL 100/200 EW SM/C12LC BLUE	SM LC 12-PACK-GANGED	109 171 876
PNL 100/200 EW SM/C6SC BLUE	SM SC 6-PACK-GANGED	109 171 884
PNL 100/200 EW SM/C6ST BLUE	SM ST 6-PACK-GANGED	109 171 892

Step 5 – Choose Bottom Feed or Top Feed Cross-Connection Module Cable Feed Arrangement

Recommended for Bottom-Feed Cable Application

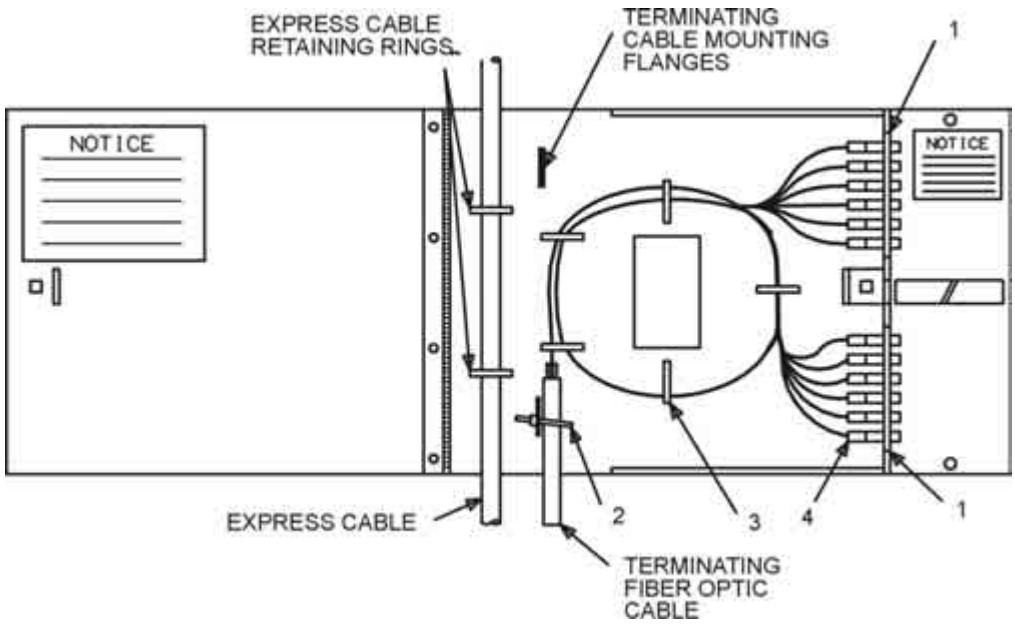

Figure 6. Cable Feed Arrangement

1. Install the fiber optic buildouts or couplings in the coupling panel; then, install the coupling panel in the cross-connection module.

NOTE:

Determine which type of coupling panels, couplings and connectors will be used. For more information, see Table 1 or Table 2.

2. Using a cable tie, secure the terminating fiber optic cable to the side of the mounting flange closest to the coupling panels.

NOTE:

Only express cables feeding upper modules are secured in the express cable retaining rings.

3. Carefully insert the fibers into the plastic ring holders, starting with the bottom ring, making not less than a 1-1/2 inch (38 mm) radius bend in the fibers.
4. Install the fiber connectors into the couplings on the coupling panel.

Recommended for Top-Feed Cable Application

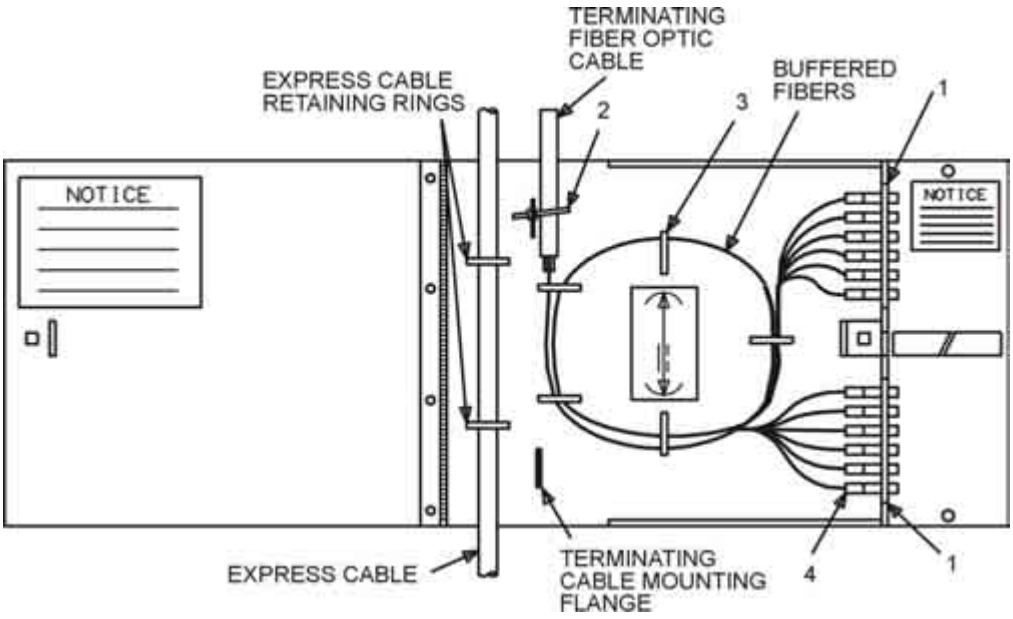

Figure 7. Cable Feed Arrangement

1. Install the fiber optic buildouts or couplings in the coupling panel; then, install the coupling panel in the cross-connection module.

NOTE:

Determine which type of coupling panels, couplings and connectors will be used. For more information, see Table 1 or Table 2.

2. Using a cable tie, secure the terminating fiber optic cable to the side of the mounting flange closest to the coupling panels.

NOTE:

Only express cables feeding lower modules are secured in the express cable retaining rings.

3. Carefully insert the fibers into the plastic ring holders, starting with the top ring, making not less than a 1-1/2 inch (38 mm) radius bend in the fibers.

4. Install the fiber connectors into the couplings on the coupling panel.

Step 6 – Assemble Interconnection Module Arrangement

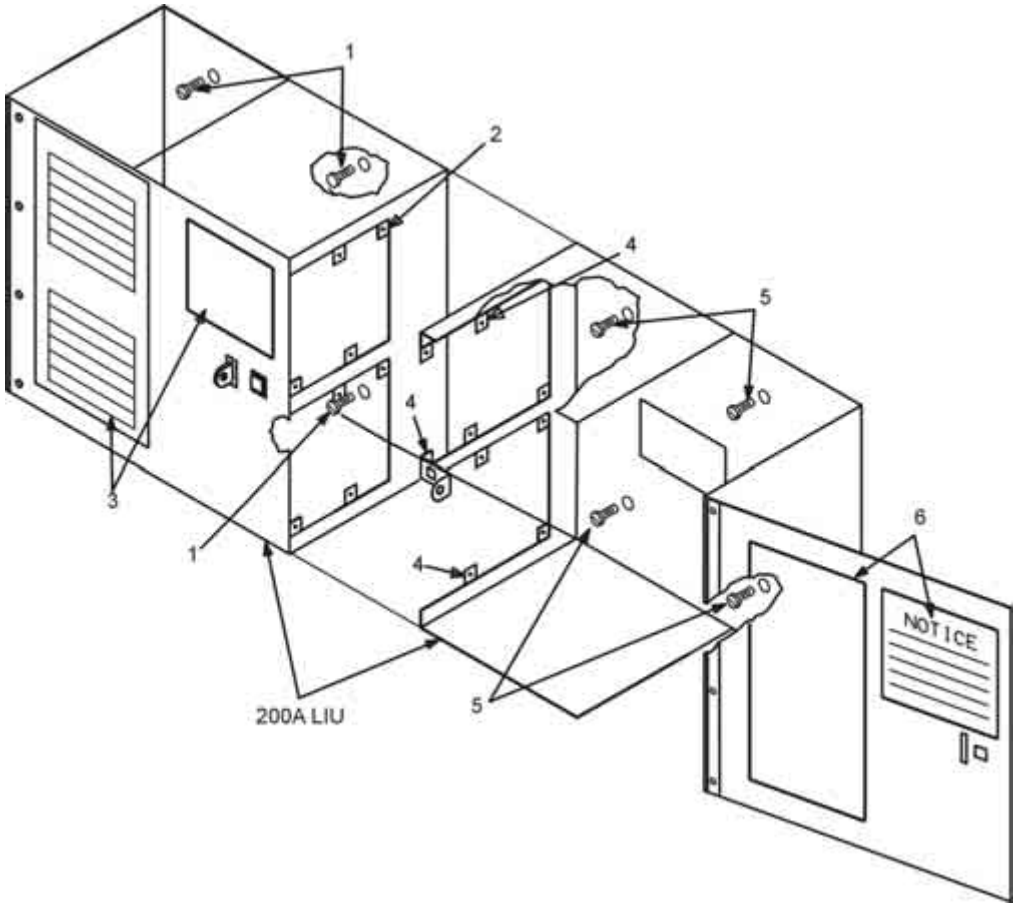

Figure 8. Interconnection Module Arrangement

1. Two 200A LIUs are required to create a 24-fiber (fiber optic) interconnection module arrangement. Using the four sheetmetal/wood screws included with the unit, mount the first module on a plywood backboard with the top not higher than 68 inches (1727 mm) above the floor.
2. Install the coupling panels in this module. See Table 1 or Table 2 for appropriate panel.
3. Place decals on the inside of the 200A LIU cover as shown. This is the left side of the interconnection module arrangement.
4. With a pair of pliers, break off the eight coupling panel mounting tabs on the second 200A LIU. Use a file to remove any burrs.

5. Using the four sheetmetal/wood screws included with the unit, mount the second 200A LIU on the plywood backboard next to the first, aligning the windows of the two modules.
6. Place decals on the inside and outside of the 200A LIU cover as shown. This is the right side of the lightguide interconnection module arrangement.

NOTE:

For a larger capacity interconnection arrangement, additional modules can be placed under these.

Step 7 – Terminate Interconnection Module Cable Feed Arrangement

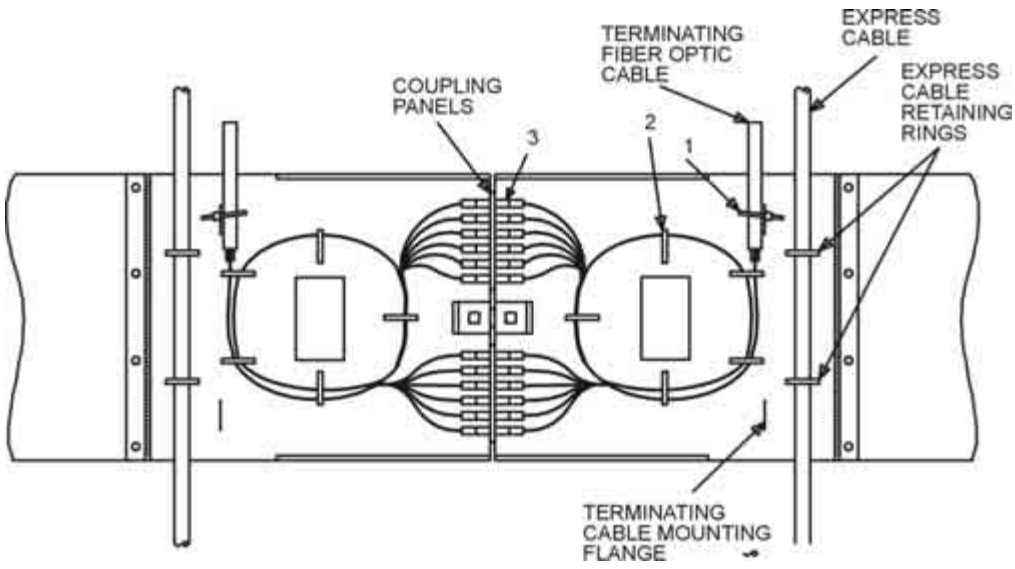

Figure 9. Interconnection Module Cable Feed Arrangement

1. Using a cable tie, secure the terminating fiber optic cable to the coupling panel side of the terminating cable mounting flange.

NOTE:

Only express cables to upper or lower modules are secured in the express cable retaining rings.

2. Carefully insert the fibers into the plastic ring holders (one fiber at a time), with as much slack as possible, making not less than a 1-1/2 inch (38 mm) radius bend in the fibers.
3. Connect the fiber connectors to the couplings on the coupling panels.