Preface

This instruction sheet covers the installation of the LRT1U-144-07 Fiber Optic Termination Shelf.

Contents:

General Notes

- The panels for the rear splice shelf are ordered seperately with SC or LC, or ST adapters.

- This product is intended for indoor use, or outdoors in a suitable protective enclosure.

List of Parts

LRT1U	Description	Quantity
	Mounting Brackets	2
	Jumper Retainers, Black, D Ring	21
	Fiber Rings, Black, Round Ring	12
	Shelf ID Label	1
	Warning Label	2
	Cable Clamp Brackets	2
	Plastic Hole Plugs	4
	Misc. Screws and Nuts	--

* For ID purposes, not for ordering

# Step 1 – Check Parts and Install Labels, Grommets, and Rings
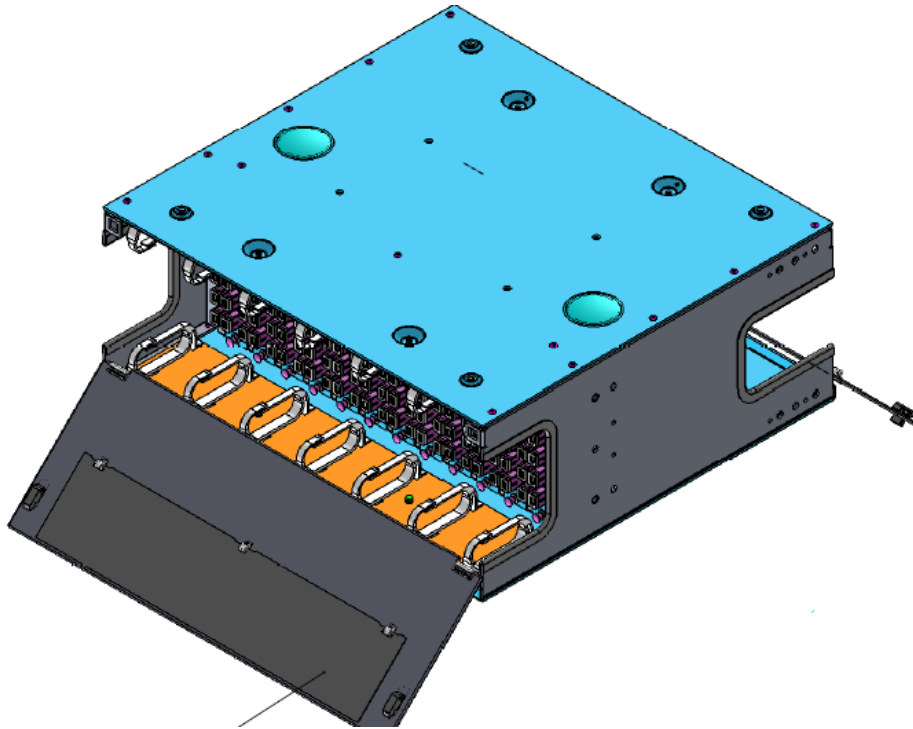
Figure 1.   Termination Shelf

⇒ NOTES:

— Grommets installed in fiber ports allow fibers to be routed internally to other shelves. To install grommets, remove bottom two fiber port plugs. Install grommets from inside shelf projecting downward as shown above. When mounting termination shelf above another shelf, remove top fiber port plugs in shelf below. When mounting under another shelf, remove top two fiber plugs in termination shelf.

— Flip-type label with fields on either side. Use one side to record fiber termination location and circuit information for positions 1-144 and back side for positions 145-288. Shelf ID label is provided to key shelf to label which may be removed from door. Shelf location ID information must be written on both the flip-type label and matching shelf ID label prior to use.Step 1 (continued)

1. Verify parts against parts list. Connector panels and adapters used with this shelf are ordered/provided separately.

2. Slide Downward front door latches and tilt open shelf front door.

3. Apply shelf ID label to panel and warning labels to either inside wall of shelf - one in front and one behind panel.

4. Twelve fiber rings and seven jumper retainers are provided for the rear of shelf. The fiber rings should be installed for buffered fiber OR the jumper retainers, if jumpers are to be terminated.

5. Fourteen jumper retainers may be installed following panel installation. Seven on top and seven on bottom.

6. Return front door to closed position make sure door latches snap in place when door is closed.

DOOR LATCH

DETAIL A
SCALE 1.5 : 1
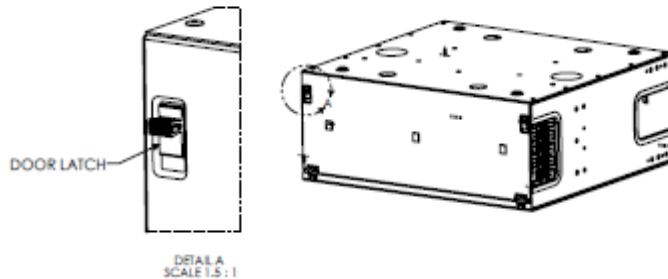
Step 2 – Install Shelf Mounting Backets and Mount Shelf
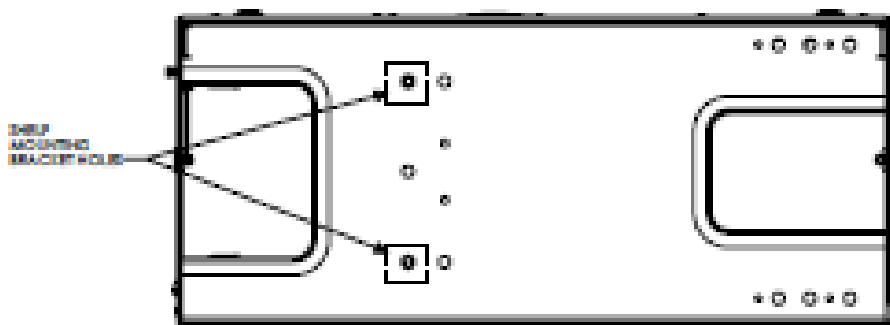
Figure 2.   Installing Shelf Mounting Brackets

1. Position and attach each mounting bracket to shelf using proper mounting holes (see above) with two 12-24 by 1/2 screws and 12-24 nuts (with captive lockwashers).

2. Install shelf to frame with two 12-24 by 1/4 screws per mounting bracket.

3. Flip brackets to install onto 19" frame.

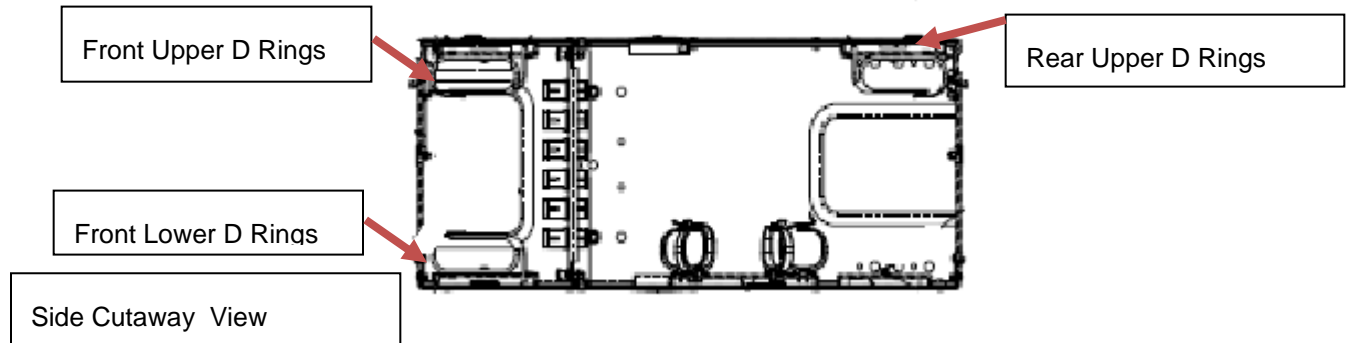## Step 3 – Install Cable Clamp Brackets and Rubber Grommets

Front Upper D Rings

Rear Upper D Rings

Front Lower D Rings

Side Cutaway View

Figure 3.   Cable Entry Options

1. Position and install each fiber ring to ring stands. The round and D Shaped rings in the rear and the D shaped rings in the front.

Step 4 – Fiber Splice Tray Plate and Round Ring Plate with Rings Pre-Installed in Rear of Shelf

Splice Tray Plate

Round Ring Plate

12 Round Rings

Lower Jumper D Rings

Top Cut Away View
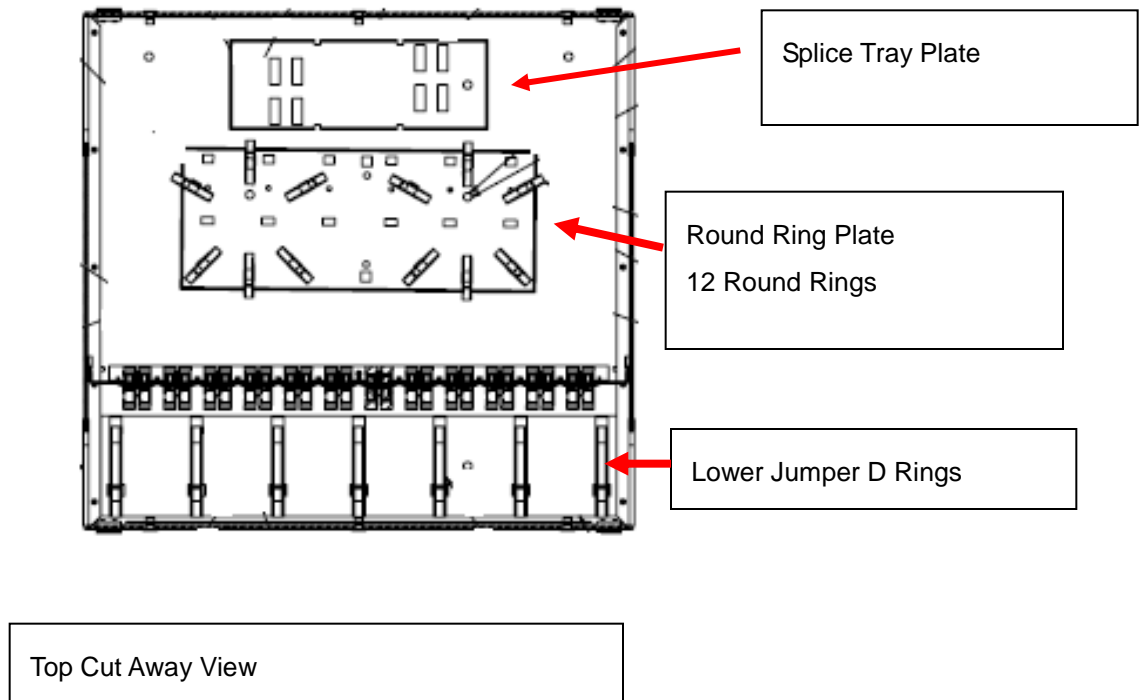
Step 5 – Install Panels to Shelf Panel

Figure 4.   Installing Connector Panels

1. Push downward front door latches tilt door to align with hinge slots and remove door.

2. Install connector panels to the panel plate.

3. Close door and set latch by depressing and releasing.

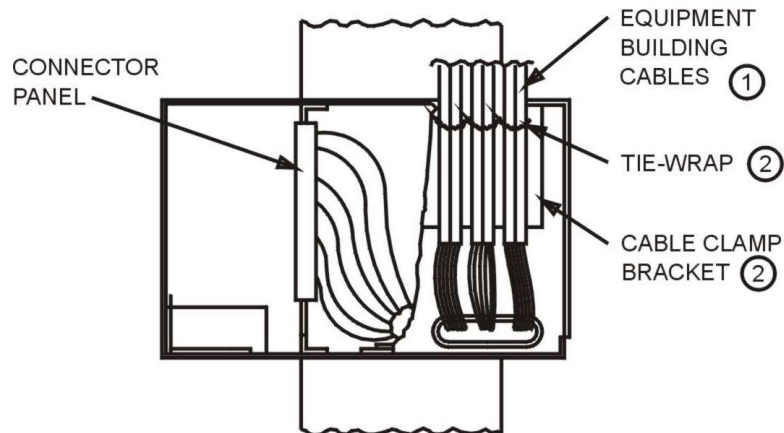# Step 6 - Install Building Cables to Shelf with Front and Rear Access (normal equipment room/CO application)

Figure 5.   Installing Building Cables

⇛**NOTE:**

> Ideal procedure for securing building cables is to use spiral wrap, if available, around each building cable at cable clamp bracket. Tie-wrap should only loop through spiral wrap to secure cable.

1. Route and loosely secure (tie-wrap) building cables to cable retainers and cable retainer brackets when used on LGX distribution frame.

2. Loosely secure (tie-wrap) building cables to cable clamp bracket on shelf. Route buffered fibers into shelf, storing fiber slack in fiber rings. Prep the cable to expose 2.5 ft. of buffered fiber in order to reach the fusion splicer.
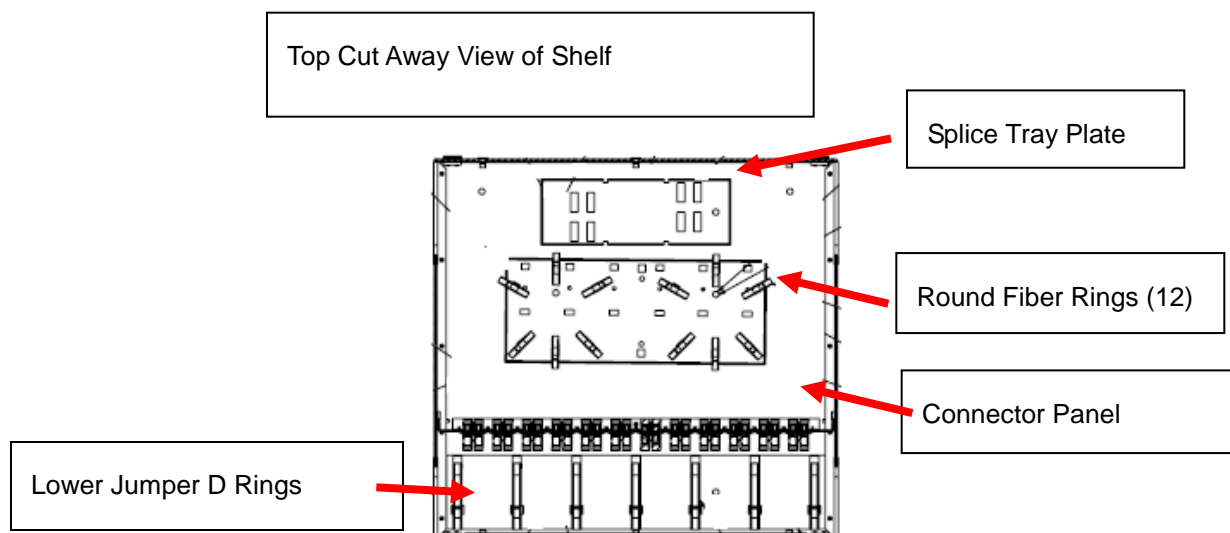
3 If pigtails are provided as part of the code then pull the ends of the pigtails to the splicer. If not place pigtails into the rear of the shelf panels and then prepare ends for splicing

4. Splice the pigtails to the Building Cable. Place the splice into the splice trays that are snapped into splice tray and using a figure 8 arrangement coil the spliced fiber into the rings between the splice tray and the panel.

Step 7 – Install OSP Cable (direct termination) to Shelves with Front Access.
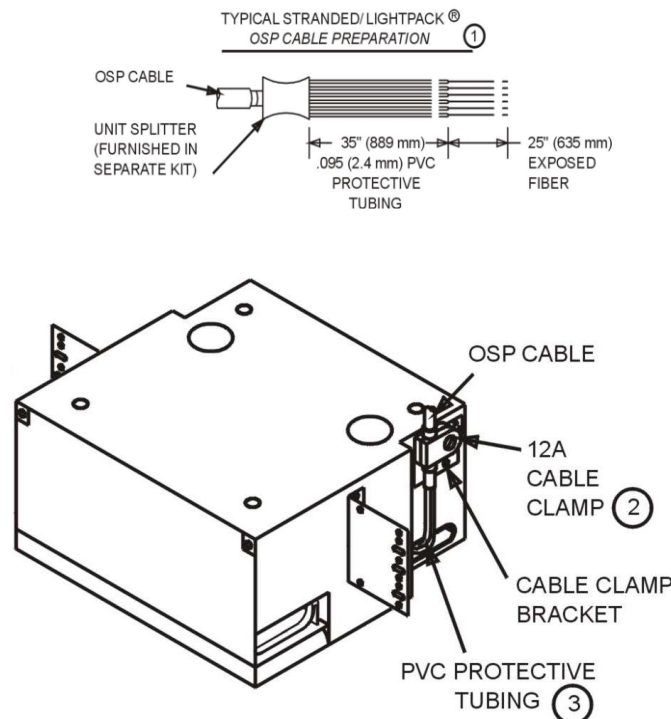
Figure 6.   Installing OSP Cables to Shelves

1. Prepare stranded Outside Plant (OSP) cables typically as shown above using unit splitter. See 636-299-110 for cable preparation procedures for this and other types of cable.

2. Secure and ground OSP metallic cables to cable clamp bracket and frame, respectively, with 12A1 cable clamps (refer to 636-299-110 for details). Use 12A2 cable clamps with OSP nonmetallic cables. The 12A clamps are ordered/provided separately - one per OSP cable to be secured.

3. Route OSP cable fibers into shelf for buffering, connectorization, and termination to connector panels. Prepare 2.5 ft of buffered fiber for splicing to pigtails.

4   If pigtails are provided as part of the code then pull the ends of the pigtails to the splicer. If not place pigtails into the rear of the shelf panels and then prepare ends for splicing

5. Splice the pigtails to the OSP cable. Place the splice into the splice trays that are snapped into the splice tray and using a figure 8 arrangement coil the spliced fiber into the rings between the splice tray and the panel.