This instruction sheet is intended for use with the installation of an LGX Distribution Frame which shall be equipped with either Group 2 hardware [12-inch (305 mm) deep frame] or Group 7 hardware [15-inch (381 mm) deep frame].

1. CHECK LIST FOR LGX DISTRIBUTING FRAME GROUP 2 OR GROUP 7 PARTS.

LGX Distributing Frame (ED-6C321-50)		
	Group 2	**Group 7**
Description	**Quantity**	**Quantity**
Instruction Sheet (Cabling) 636-299-104-4	1	1
Screws and Nuts (Misc. Bags)	Page 2	Page 2
Duct Brackets, 12-inch	12	12
Duct Walls, Lower	2	2
Duct Walls, Upper	2	2
Cable Retainer, Left Hand	1	1
Cable Retainer, Ri ht Hand	1	1
Top Brace	1	1
Lower Brace (Base)	1	1
Cable Aligners	2	2
Aligner Plates	2	2
Upper Raceway	1	1
Lower Raceway Assembly, BE1	1	1
JR4A Jumper Retainer Brackets	18	18
Jumper Retainer Extensions	9	9
Jumper Support Bracket*	1	1
Cable Retainer Brackets	4	-
Cable Brackets, Wide	-	2
Cable Brackets Narrow	-	8
Floor mounting hardware (Plastic Bag)	Page 2,4	Page 2,4

* Used between two adjoining ***LGX*** Distributing Frames

2. IDENTIFICATION TEMPLATE FOR GROUPS 2 AND 7 FASTENING HARDWARE

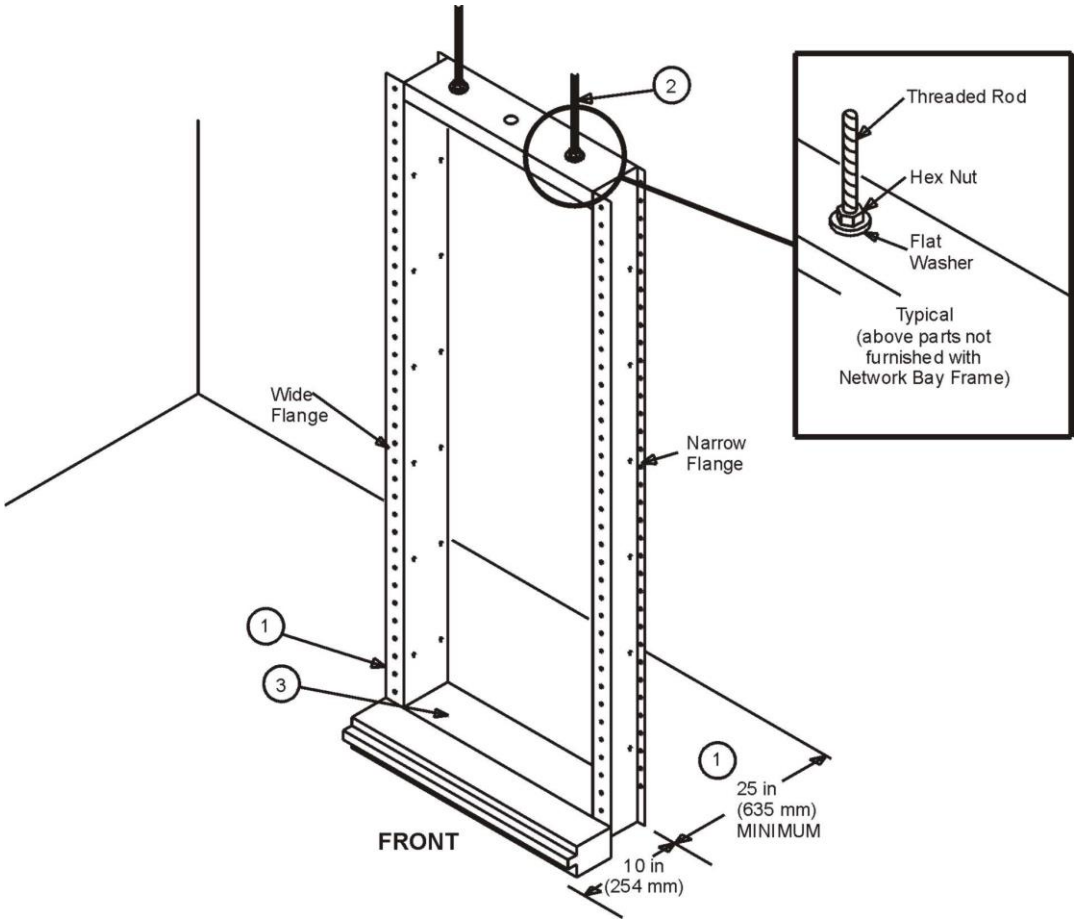
FASTENER DESCRIPTION	FOR GROUP 2 PARTS	FOR GROUP 7 PARTS
12-24 X 1/4 SCREW* (54/66) 	24 - DUCT BRACKETS 12-INCH BAY 8 - CABLE RETAINER BRACKETS 4 - CABLE RETAINERS, LH & RH 4 - TOP BRACE/DUCT WALLS 6 - BASE BRACE/DUCT WALLS 4 - TOP RACEWAY 4 - BASE RACEWAY	24 - DUCT BRACKETS, 15-INCH BAY 8 - CABLE RETAINER BRACKETS 4 - CABLE RETAINERS, LH & RH 4 - TOP BRACE/DUCT WALLS 6 - BASE BRACE/DUCT WALLS 4 - TOP RACEWAY 4 - BASE RACEWAY 4 - WIDE BRACKET, CABLE RETAINER 8 - NARROW BRACKET, CABLE RETAINER
6-32 X 5/16 SCREW* (24/24) 	24 - DUCT WALLS/DUCT BRACKETS	24 - DUCT WALLS/DUCT BRACKETS
12-24 X 3/8 SCREW* (44/44) 	4 - CABLE ALIGNERS, ALIGNER PLATES 36 - JUMPER RETAINERS 4 - JUMPER SUPPORT	4 - CABLE ALIGNERS, ALIGNER PLATES 36 - JUMPER RETAINERS 4 - JUMPER SUPPORT
10-24 X SCREW* (4/4) 	4 JUNCTION PLATE/BASE RACEWAY	4 JUNCTION PLATE/BASE RACEWAY
10-24 ACORN NUT (4/4) 	4 JUNCTION PLATE/BASE RACEWAY	4 JUNCTION PLATE/BASE RACEWAY

* Universal/Combination Head

In addition to the above, the following parts are included with the lgx distributing frames:

FLOOR MOUNTING FRAME PARTS:	**ALSO SHOWN ON PAGE 4**
½-INCH FLAT WASHERS (QTY 8)	
HEX NUTS (QTY 16)	CLIP HANGERS (QTY 4)
½-13X7-INCH (QTY 4)	COUPLER NUTS (QTY 4)
½-13X3-½-INCH TREADED ROD (QTY 4)	½-INCH EXTERNAL TOOTH LOCK WASHER (QTY 4)
½- INCH DROP-IN ANCHORS (QTY 4)	DROP-IN ANCHOR TOOL
INSULATING BUSHINGS (PLASTIC) (QTY 4)	

STEP 1. INSTALL LGX NETWORK BAY FRAME DF OR SEISMIC BAY FRAME

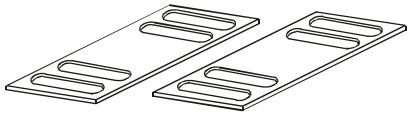
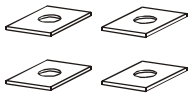
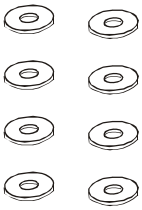
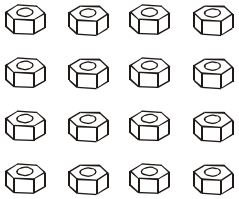
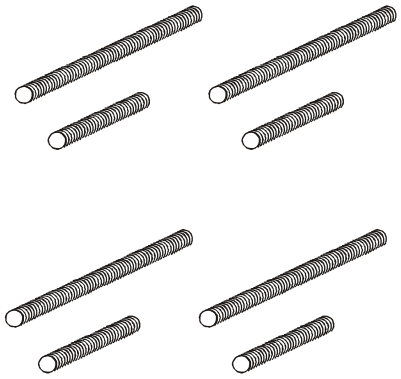
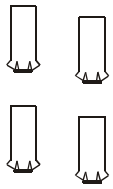
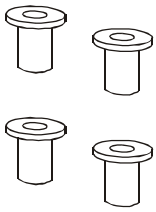
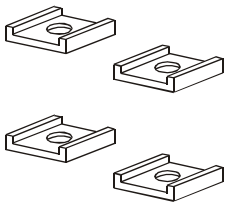
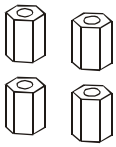
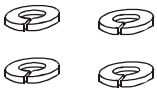


NOTE 1: Rear 2-inch guard rail should not be installed on network bay frames or seismic frames for LGX applications.

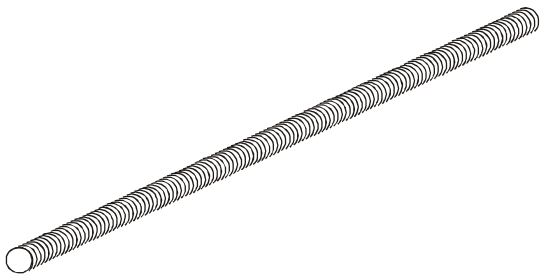
1. Position frame with wide flanges (front of frame) toward maintenance aisle. If rear of frame will be close to wall, mount components on rear of frame before securing frame to floor. A minimum of 25 inches (635 mm) of clearance from wall or lineup is recommended at rear of frame. If FEX1A-FB Rear Bracket Extension or Group 7 parts are used, 28 inches (711 mm) of clearance is recommended for the 15-inch (381 mm) deep frame.
2. Secure frame to overhead framing with locally obtained hardware in accordance with local practices.
3. Remove screws from lower cover of frame to permit installation to floor. Secure frame to floor using techniques described in STEP 1A, STEP 1B or STEP 1C.

NOTE 2: LGX DF parts may also be mounted on ED-8C501-50 network bay frames or ED-8C801-50 seismic frames GR2 [9ft. (2.7 m)] and GR3 [11 ft. (3.5 m)].

PARTS NEEDED FOR CONCRETE & RAISED FLOOR INSTALLATION

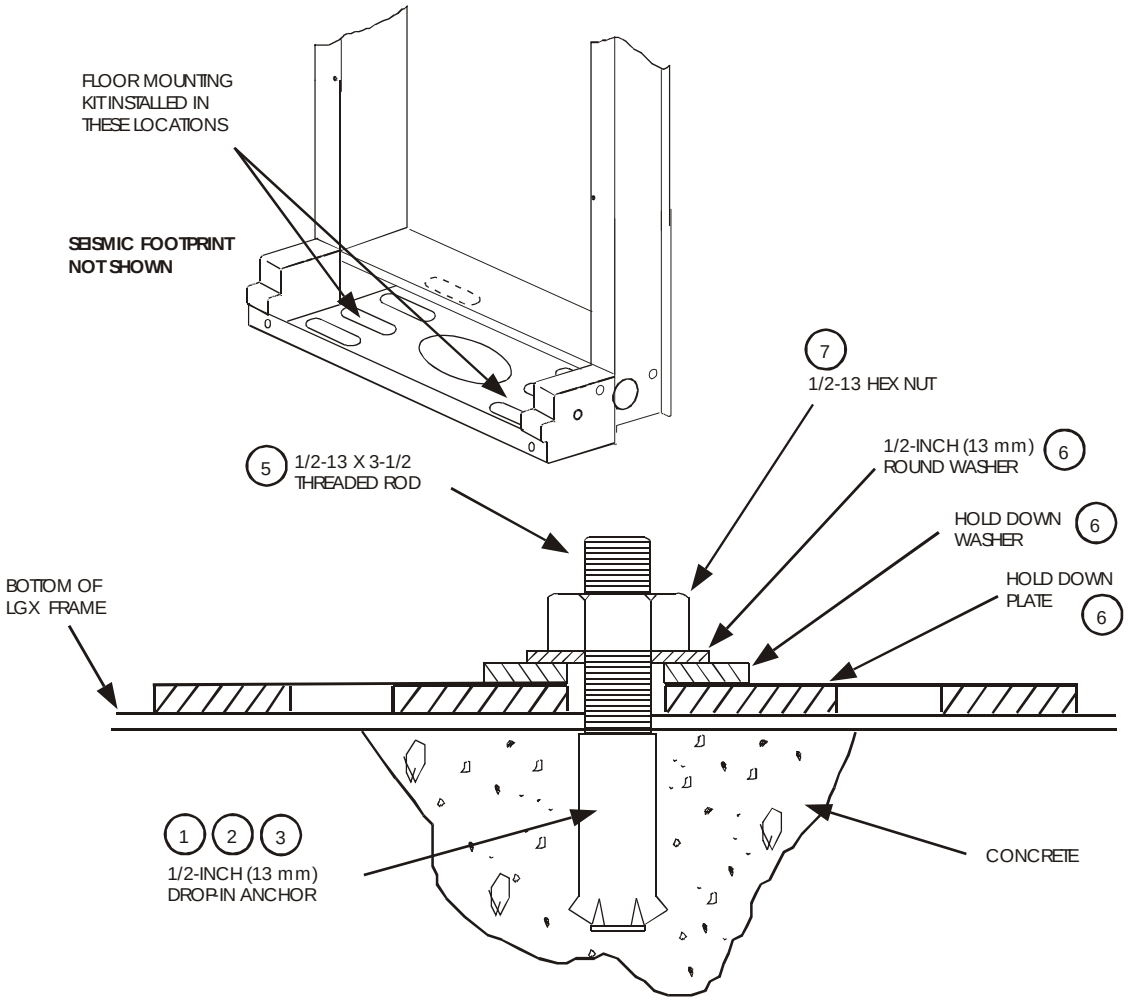
 Hold Down plates (Qty 2) **Seismic plates not shown**	 Hold Down Washers (Qty 4)	 1/2 inch Flat Washers (Qty 8)	 1/2 –13 Hex Nuts (Qty16)
 1/2-13x 7-inch (Qty 4) 1/2-13x 3-½-inch Treaded Rod (Qty 4)	 1/2 inch Drop-in Anchors (Qty 4)	 Insulating Bushings (plastic) (Qty 4)	 Clip Hangers (Qty 4)
	 Coupler Nuts (Qty 4)	 1/2-inch External Tooth Lock Washer (Qty 4)	Drop-in anchor tool (not shown) (Qty 1)

⇒NOTE THIS ITEM MUST BE LOCALLY OBTAINED AND IS ONLY USED FOR RAISED FLOOR INTO CONCRETE APPLICATIONS. NOT PART OF THIS KIT.



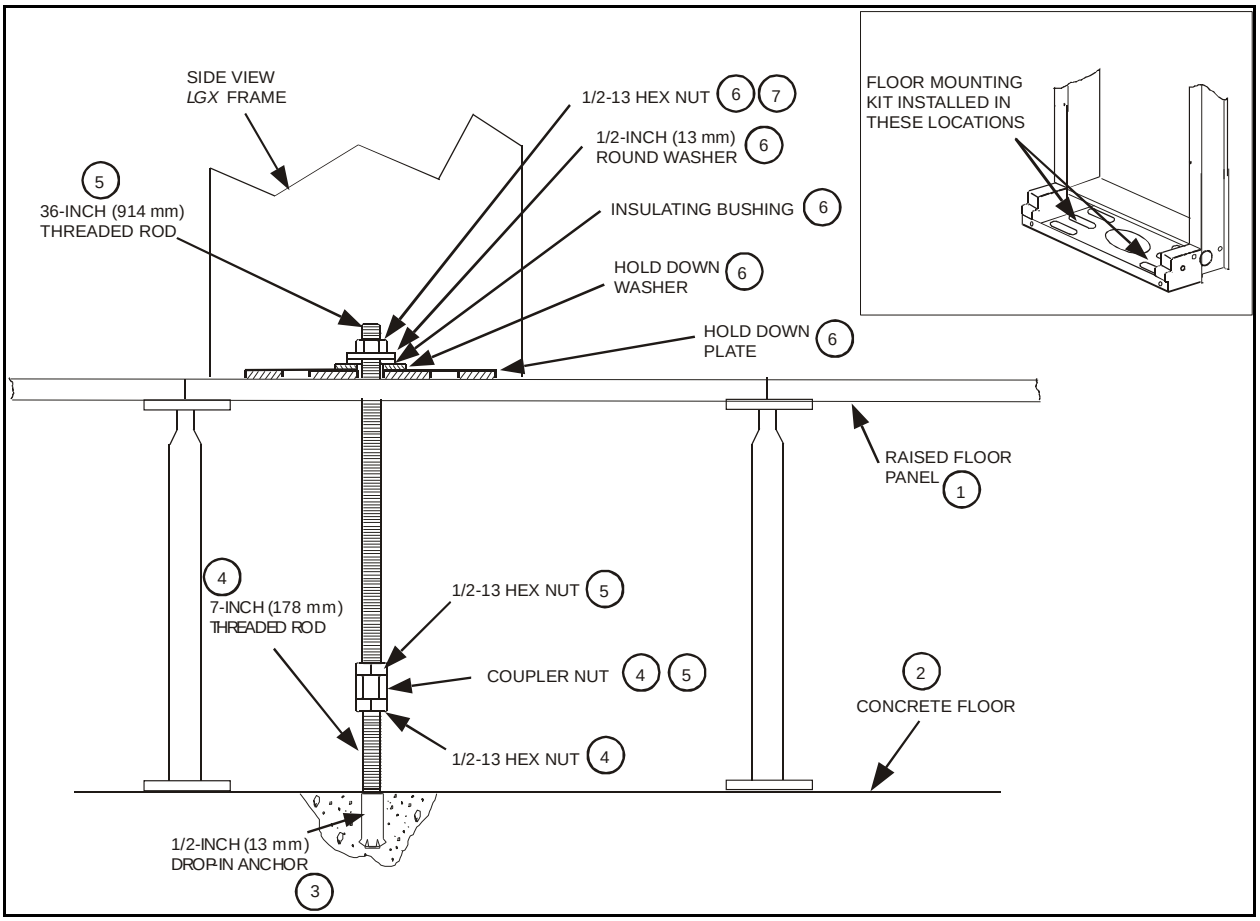
½ -13 x 36 – inch Thread Rod (Qty 4) Needed for Raised Floor

STEP 1A — INSTALLING FRAME TO CONCRETE FLOOR (ALL EARTHQUAKE ZONES)



1) Position frame and through the openings in the base, mark hole position on each side of frame. Move frame for drilling.
2) Drill two holes in concrete for ½-inch (13mm) Drop-In Anchors (one on each side).
3) Position Drop-in Anchors in holes. Insert Setting Tool and Strike with hammer until Anchor is fully set. Top of anchor should be flush to, or slightly under, the concrete surface.
4) Move frame back into position over holes/anchors.
5) Thread one 3-1/2 inch (89mm) Thread Rod through frame opening into each Drop-In Anchor.
6) Position one Hold Down Plate, Hold Down Washer (square) and ½-inch (13mm) Round Washer over Threaded Rod on each side of frame base.
7) Place a ½-13 Hex Nut on each Thread Rod and tighten to secure frame to the concrete floor.

STEP 1B — INSTALLING FRAME TO RAISED FLOOR (ALL EARTHQUAKE ZONES)



1) Drill a hole for the threaded rod through the raised floor panel on both sides of frame base. Holes should align with openings in bottom of frame.

2) Drill holes in concrete floor for Drop-in Anchors. Holes should align with holes in raised floor panel.

3) Position Drop-in Anchors in holes. Insert Setting Tool and Strike with hammer until Anchor is fully set. Top of anchor should be flush to, or slightly under, the concrete surface.

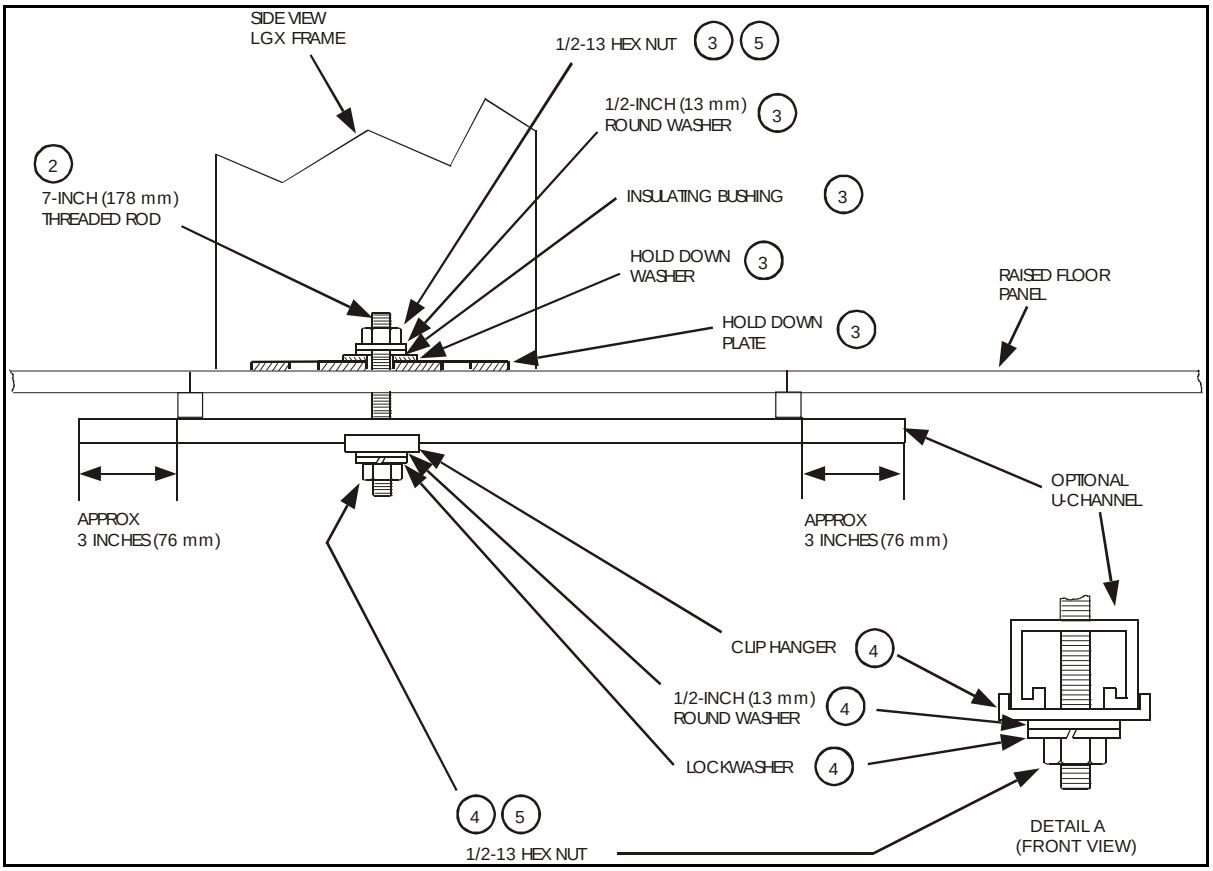
4) Install a ½-13 hex nut and coupler onto 7 inch (178 mm) Threaded rod (threaded rod should go half-way into coupler nut and ½- 13 hex nut should be snugged up against bottom coupler nut.) Thread one 7 inch Threaded Rod into each Drop-in Anchor. Tighten 7inch rod into Drop-in Anchor using the Coupler nut.

5) One 36-inch (914mm) Thearded Rod should be positioned trough frame opening and floor panel through a ½-13 hex nut and completely into the top of te Coupler nut . Snug ½-13 hex nut down onto Coupler nut. Do this for both sides of frame.

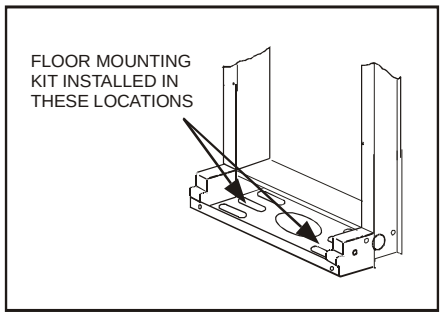
6) Position One Hold Down Plate, Hold Down Washer(square), Insulating Bushing, ½-inch (13mm) Round Washer and ½-13 Hex Nut on Top of Thread Rod on each side of frame base.

7) Tighten ½-13 Hex Nuts to secure frame to the raised floor and concrete floor.

STEP 1C — INSTALLING FRAME TO RAISED FLOOR (EARTHQUAKE ZONES 0 & 1)

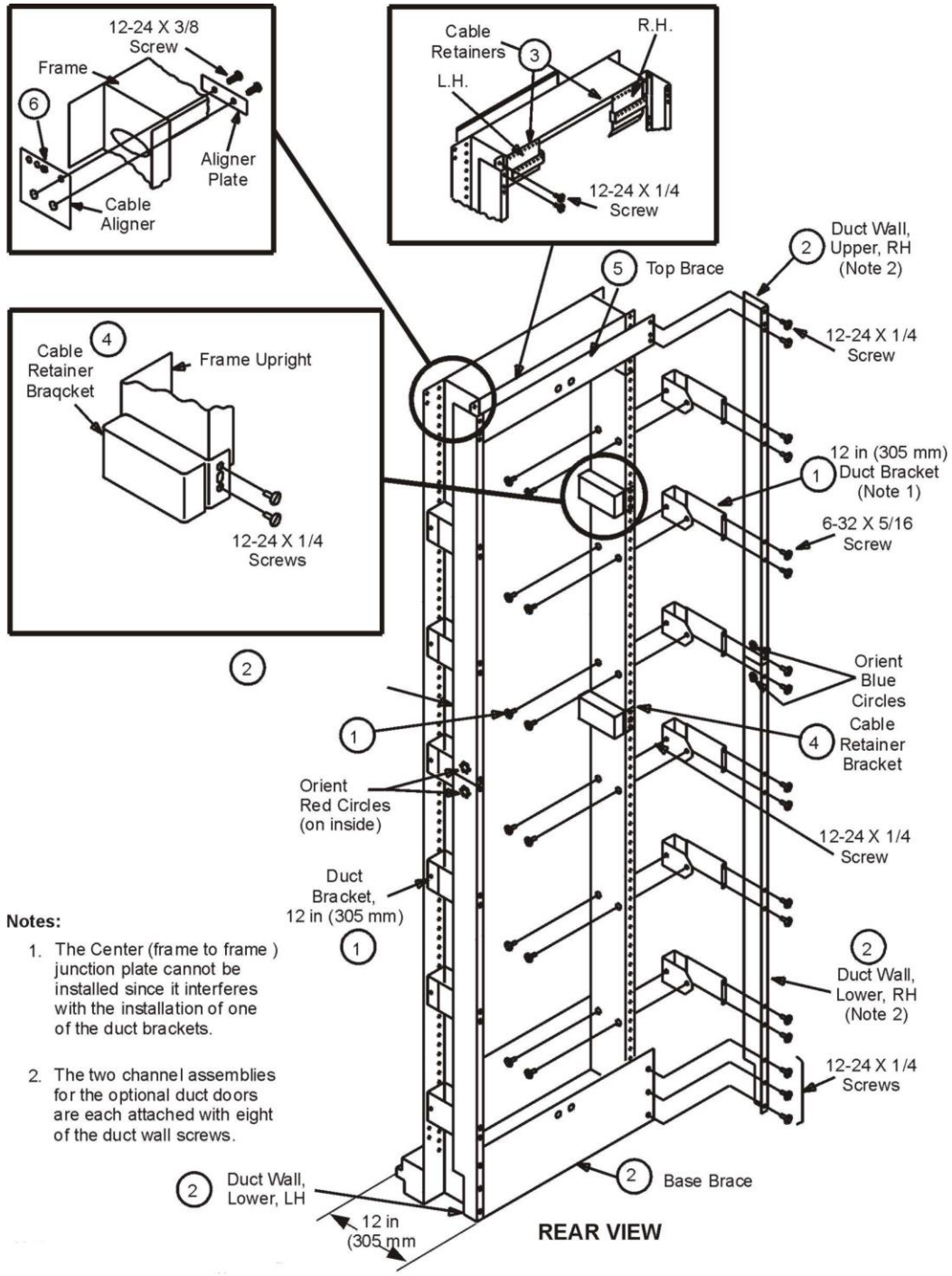


1) Position frame and through the openings in the base, mark hole position on each side of frame. Move frame for drilling.
2) Drill holes in raised floor panel
3) Move frame back into position over holes.
4) Place a 7 inch (178mm) Threaded Rod through frame opening, hole in floor panel and trough optional U-channel for each side of frame. Reference illustration above for details.



3) Position One Hold Down Plate, Hold Down Washer(square), Insulating Bushing, ½-inch (13mm) Round Washer and ½-13 Hex Nut on Top of Thread Rod on each side of frame base.
4) Position Clip Hanger, ½-inch (13mm) Round Washer, Lockwasher and Hex Nut on bottom of Threaded Rod (below floor panel). See Detail A above.
5) Tighten ½-13 Hex Nut to Secure frame to the raised floor.

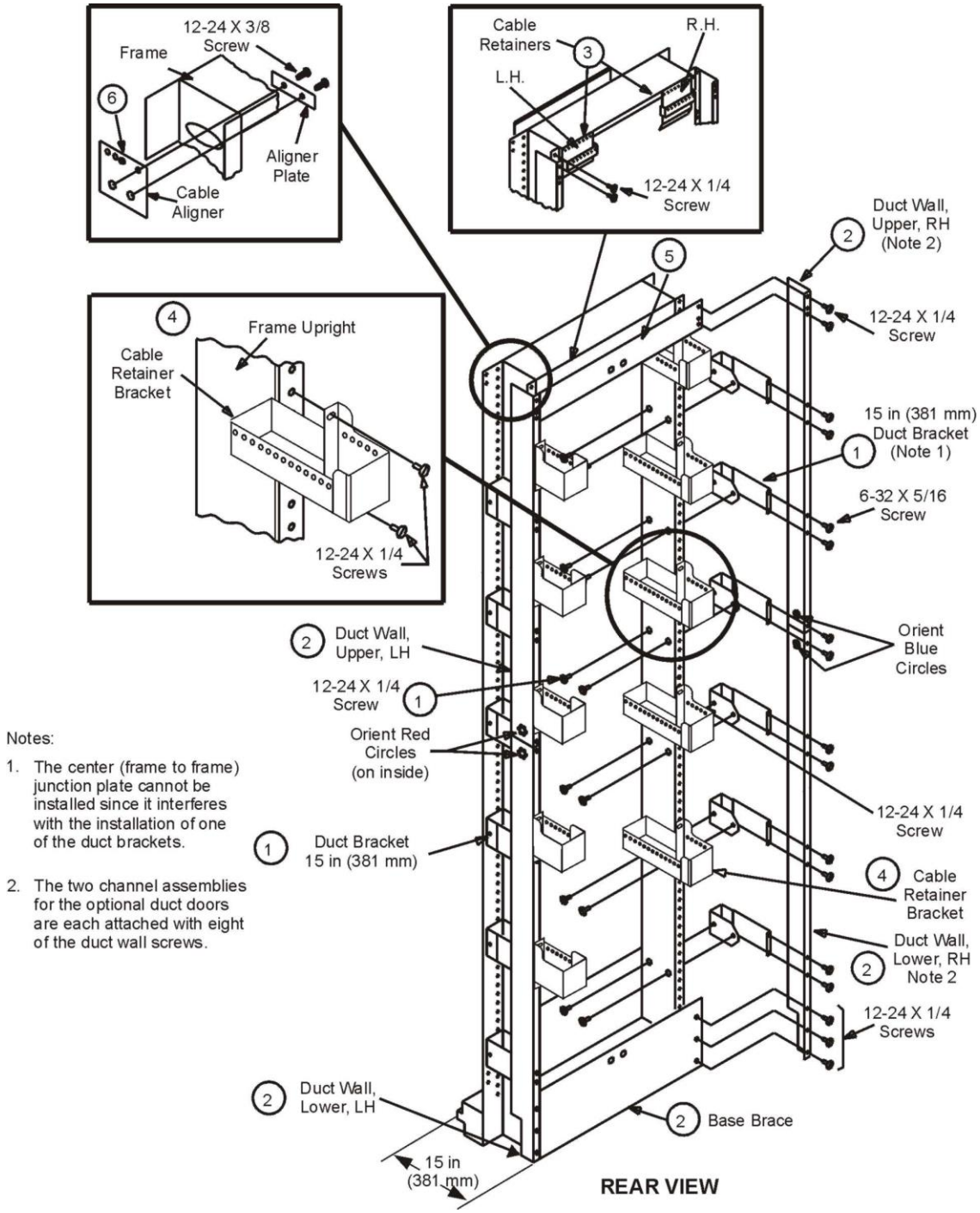
STEP 2. INSTALL REAR CABLING DUCTS, RETAINERS, AND ALIGNERS (ED-6C321-50, Group 2)



Notes:

1. The Center (frame to frame) junction plate cannot be installed since it interferes with the installation of one of the duct brackets.
2. The two channel assemblies for the optional duct doors are each attached with eight of the duct wall screws.

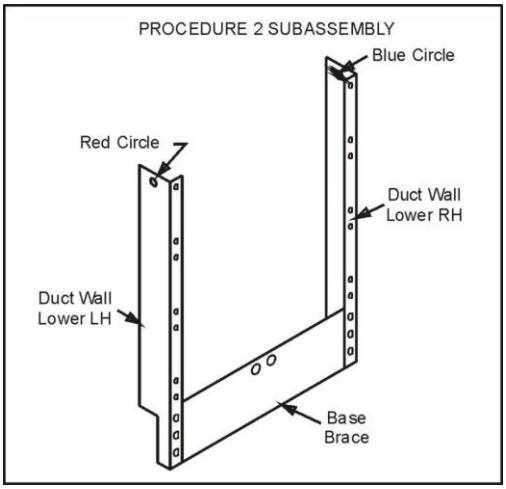
STEP 2 - INSTALL REAR CABLING DUCTS, RETAINERS, AND ALIGNERS (ED-6C321-50, Group 7)



Notes:

1. The center (frame to frame) junction plate cannot be installed since it interferes with the installation of one of the duct brackets.
2. The two channel assemblies for the optional duct doors are each attached with eight of the duct wall screws.

STEP 2 - INSTALL REAR CABLING DUCTS, RETAINERS, AND ALIGNERS (Contd)

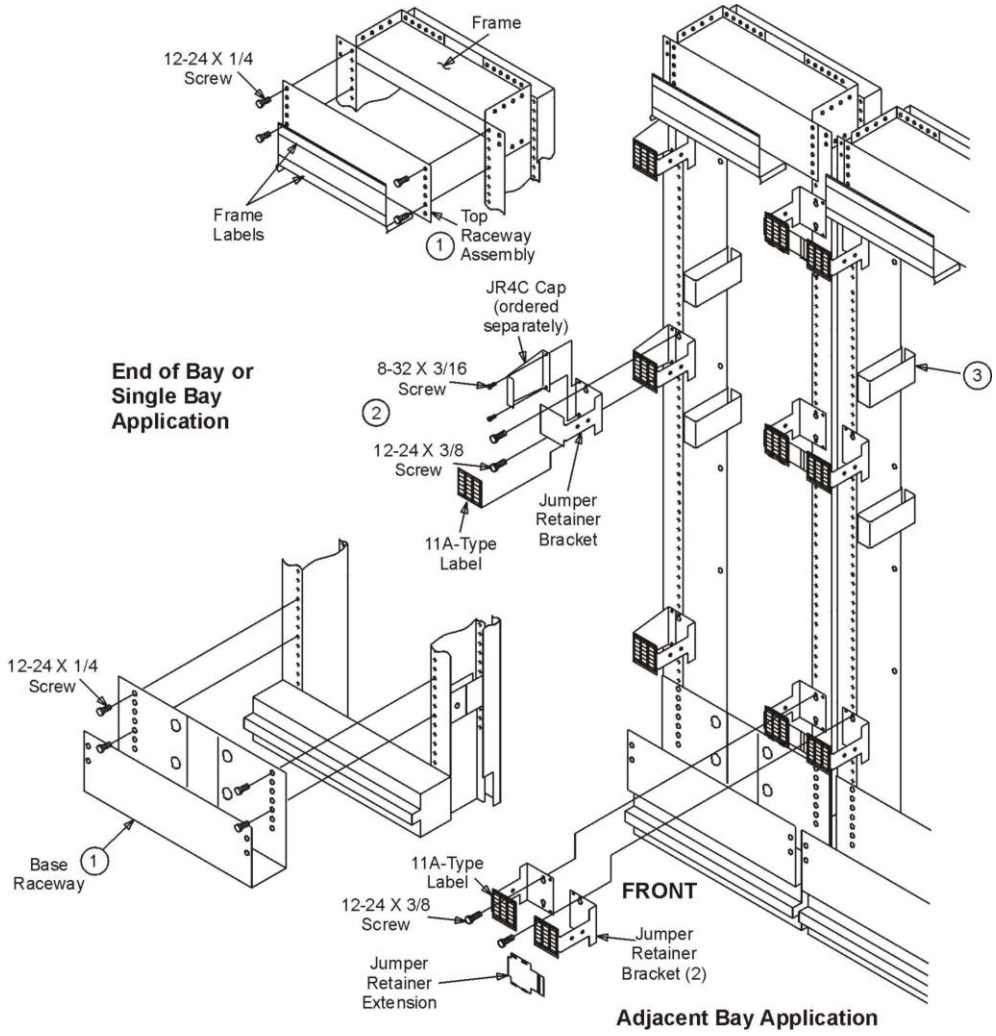


1. Install six duct brackets to each side of frame (see Note on previous page). If needed, attach duct Bracket extensions FEX1A-FB (must be ordered separately) to duct brackets. Do not tighten screws until after completing following step.
2. Loosely attach lower duct wall sections to base brace forming a subassembly as shown above. Secure subassembly and upper duct wall sections to duct wall brackets or bracket extensions. Colored circles on each duct wall section are used for orienting pieces (see Step 2 illustration). Tighten screws for base brace and duct brackets. Each of two channel assemblies for optional duct doors is attached with eight duct wall screws. Where duct doors are to be installed, attach door channel assemblies, if available, during duct wall installation.
   See duct door instruction sheet (Comcode 845866375, 636-299-104-2 Instruction sheet) for details.
3. Mount LH and RH cable retainers to rear frame uprights at top of frame.
4. (a) For **Group 2**, install four cable retainer brackets to frame uprights. Locate two on each side approximately 15 inches (38 cm) from top of frame and other two on each side just below mid-height. of frame.

   (b) For **Group 7**, install two wide and eight narrow cable retainer brackets as shown in Step 2, page 5. Two wide brackets shall be located on each side approximately four inches from the top of the frame. The narrow brackets shall be located (in pairs, on each side of the frame) at approximately 16 inches (41 cm), 30 inches (76 cm), 44 inches (112 cm), and 58 inches (147 cm) respectively from top of frame.

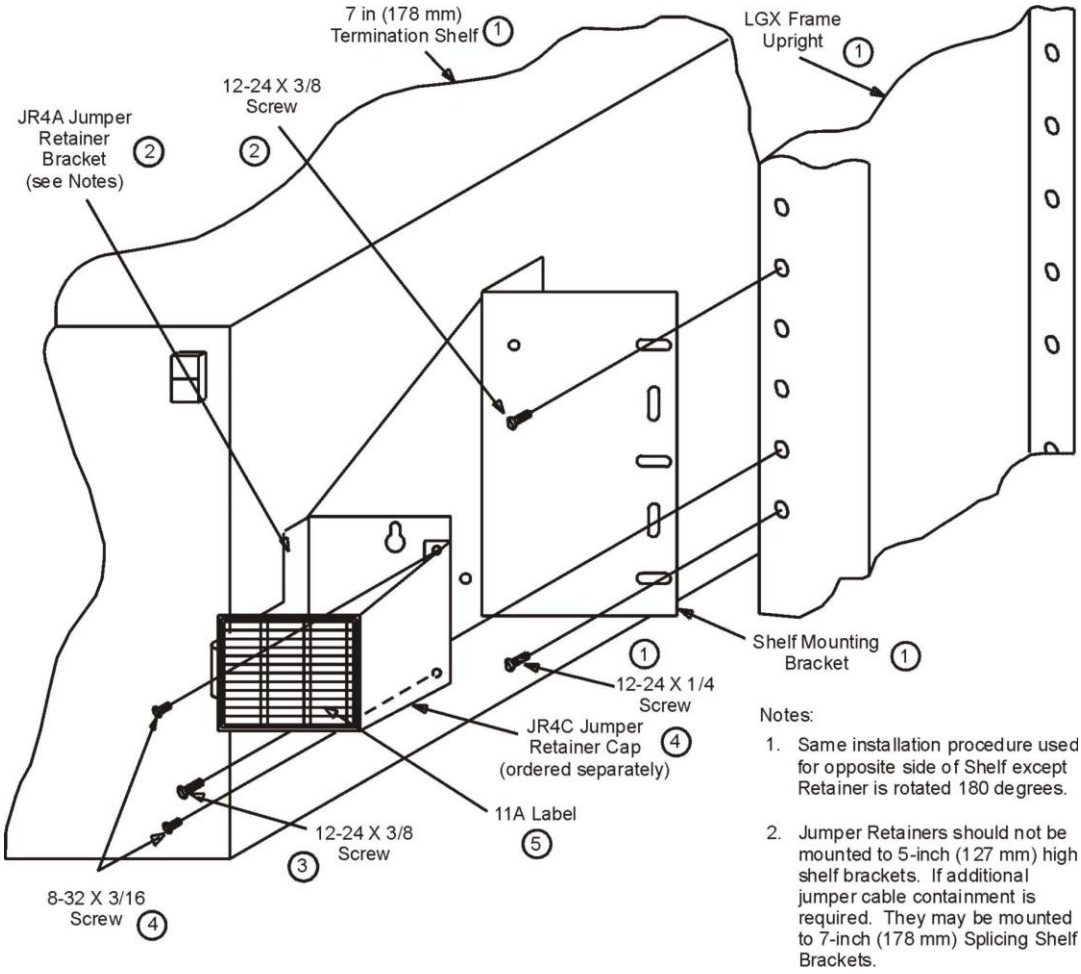
   Note: When lightguide shelves are installed on the frame, the cable retainer brackets may have to be relocated slightly to avoid screw interference with shelf brackets.
5. Mount top brace to duct walls.
6. Install cable aligner and aligner plate to each side of frame.

STEP 3 - INSTALL RACEWAYS AND JUMPER RETAINERS



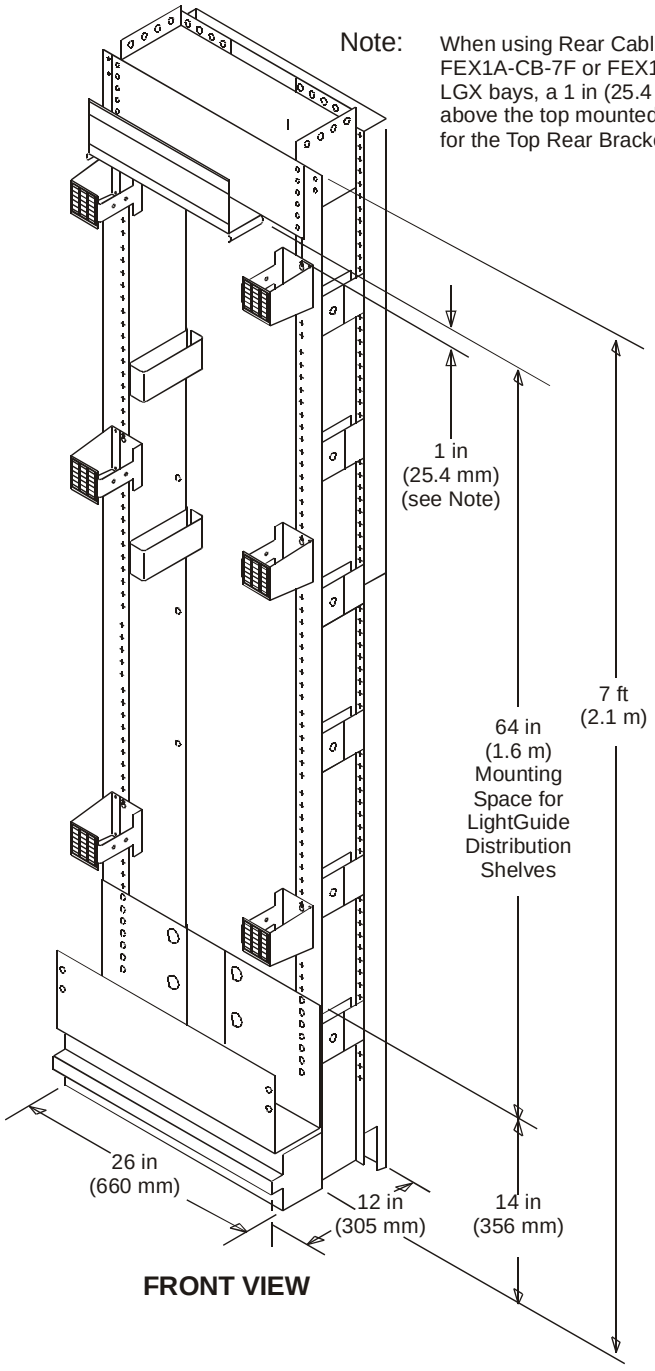
1. Install top raceway assembly and base raceway.
2. If 7-inch (178 mm) termination shelves are available, mount shelves first and then mount jumper retainers on shelves single bay (see Step 4) or adjacent bay for end of bay or single bay applications. Install remaining jumper retainers on front of frame. Shelves mounted later will require removal of frame-mounted jumper retainers. Reinstall these jumper retainers on termination shelves or subassemblies.
3. Frame shown is equipped with Group 2 hardware. Cable brackets shown are not supplied with Group 7. For a Group 7 installation, the cable brackets in the figure on page 5 are used.

STEP 4 - INSTALL RETAINERS ON TERMINATION SHELF BRACKETS (END OF BAY OR SINGLE BAY APPLICATION SHOWN)



1. Install termination shelf with mounting brackets to LGX frame with two 12-24 by 1/4 screws furnished with shelf, one screw installed in bottom hole of each mounting bracket. Do not tighten screws.
2. Start 12-24 by 3/8 screw furnished for jumper retainers through top hole of each shelf mounting bracket as shown. Position retainer bracket top keyhole slot onto screw. Repeat procedure for opposite side of shelf bracket except rotate retainer 180 degrees. When seated, top of retainer bracket should be aligned with top of brackets.
3. Install 12-24 by 3/8 screw in bottom keyhole slot of each retainer bracket. Tighten all screws to complete installation.
4. Install separately ordered JR4C Caps to each retainer bracket with two 8-32 by 3/16 screws.
5. Install label on front of each retainer bracket.

STEP 5 - COMPLETED ASSEMBLY OF LGX DISTRIBUTING FRAME, ED-6C321-50, GROUP 2 HARDWARE

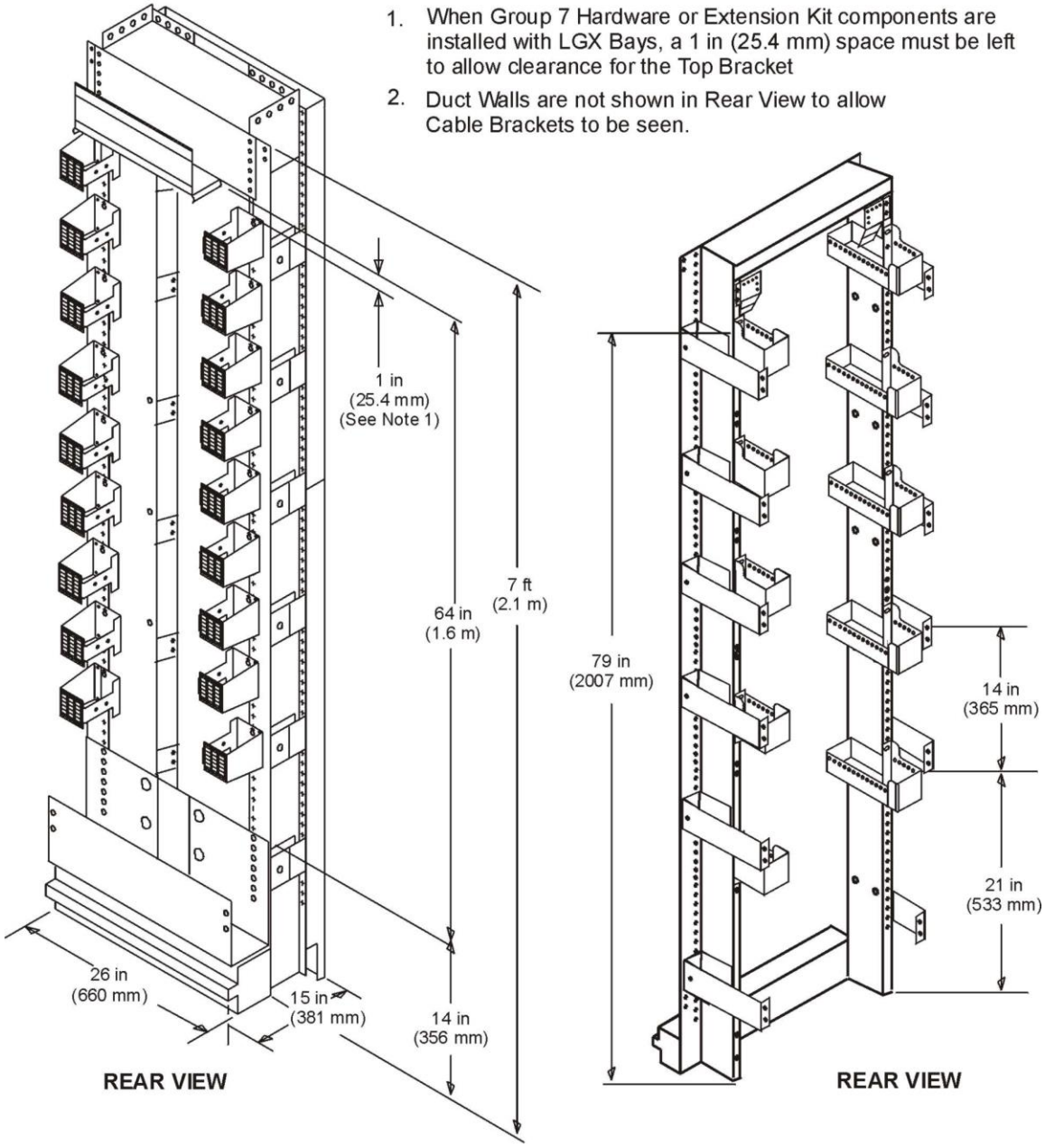


ED 6C321-50 GR1 LGX Distributing Frame

STEP 5 - COMPLETED ASSEMBLY OF LGX DISTRIBUTING FRAME, ED-6C321-50, GROUP 7 HARDWARE

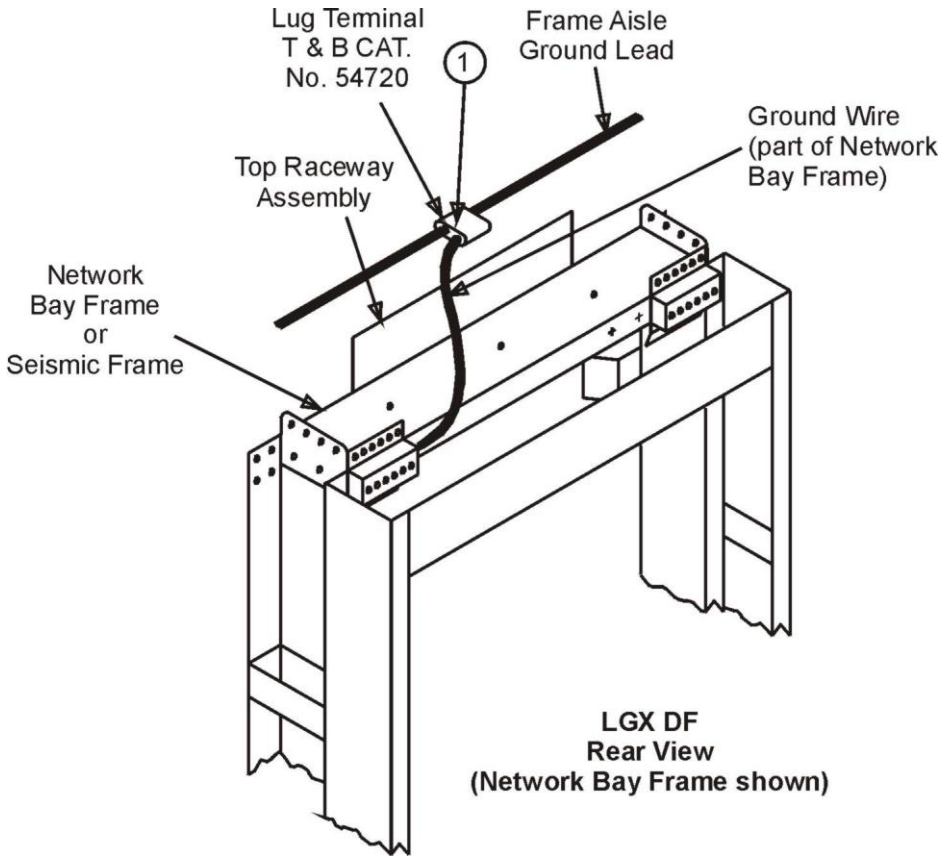
Notes:

1. When Group 7 Hardware or Extension Kit components are installed with LGX Bays, a 1 in (25.4 mm) space must be left to allow clearance for the Top Bracket
2. Duct Walls are not shown in Rear View to allow Cable Brackets to be seen.



ED6C321-50 GR1 LGX DISTRIBUTING FRAME

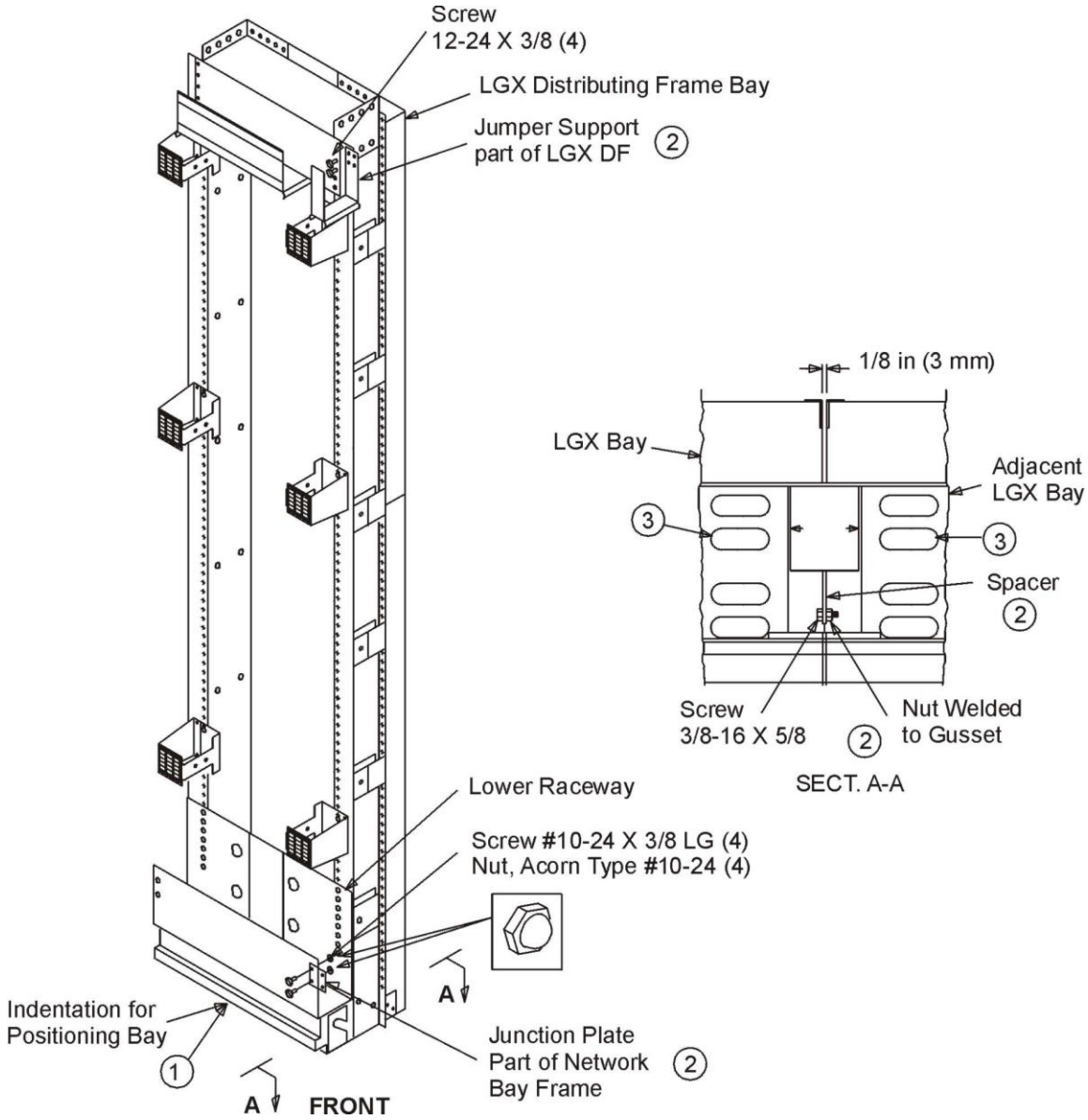
STEP 6 - INSTALL FRAME GROUND WIRE



1. Connect network bay frame or seismic frame ground wire assembly to frame aisle ground lead per local practice.

NOTE: Where outside plant cable ground lugs are attached to frame, surface paint must be removed.

STEP 7 - SECURE ADJACENT LGX DF BAYS



1. Align indentation (located in front of frame) with floor plan.
2. Attach spacer and junction plate at bottom of bay and jumper support at top.
3. Anchor frames to floor per local practice.
4. Procedures shown are on Group 2 hardware (12 inch). Group 7 hardware (15 inch) is identical with respect to this operation.