Chapter 1 Assembling the Lista Storage Wall

Lista provides two types of standard Storage Walls: B251 and B255. The design, construction, assembly, and quality are identical for both types, however, B251 and B255 components cannot be interchanged. The B251 Storage Wall includes drawers with inside depth dimensions of 24" (610mm) and a frame depth of 27 ½" (700mm). The B255 Storage Wall includes drawers that are 18" deep (459mm) and a frame depth of 21 ¾" (553mm).

Before Assembling the Storage Wall

Before you begin assembling the Storage Wall, read through the assembly instructions to familiarize yourself with the order in which the parts are assembled.

> **Note: Assembling the Storage Wall requires two people.**

It is important to assemble the components in the same sequence as described in this manual. Lista labels all Storage Wall shipping cartons with numbers to indicate the sequential order of components during assembly. This lets you stage the cartons for faster and easier access.

- Before assembling the Storage Wall, make sure that the floor meets the load carrying requirements. Lista does not assume responsibility for improper loading that could cause damage or injury.

- Make sure the location of the Storage Wall includes the following considerations:

  ⇒ **Amount of Service Area Needed**
  The B251 Storage Wall with a 24" deep drawer requires 39-42" of access space for a person to load and retrieve items comfortably. The B255 Storage Wall requires a minimum of 33-36".

  ⇒ **Safety Ladder**
  If installing a Safety Ladder now, or in the future, keep in mind that it requires 35 ½" of aisle space when fully opened.

  ⇒ **Location Against a Wall**
  If the Storage Wall is to be permanently located against a wall, begin the assembly 2 ½ to 3 ½ feet away from the wall. This allows enough room to install the rear panels or sway braces. The Storage Wall can then be pushed against the wall before you install the drawers or shelves.

  ⇒ **Floor Level**
  The floor must be level in all directions and should not exceed a total of 1" (25mm) of shimming.

- Check your packing list and bill of lading to make sure that all Storage Wall components are available before you begin the assembly.

- Check the packing list with a copy of your purchase order to verify receipt of all parts. In the event of shortage or damage, notify Lista Customer Service at **1-800-722-3020**.

- Avoid loading any part of the Storage Wall with a forklift. If necessary, provide protective posts on corners to avoid damage by forklifts or other trucks.

- To familiarize yourself with the assembly of the Storage Wall System, please review all sections before beginning installation.

Attaching the Vertical Side Frames to the Floor Universal Panels

Before starting this assembly, mark a chalk line on the floor to indicate the final location of the Storage Wall. If you are placing the Storage Wall against a wall, begin the assembly 2 ½ to 3 ½ feet away from the wall.

> **Note: If your Storage Wall includes:**
>
> - **Drawer Locking System(s): The Center, Top, and Floor Universal Panels may be slightly different than indicated below. If installing a locking system, the Center Lock Panel (LP/3) will have a hole in the front to accommodate the lock. The bottom Universal Panel (LP/1) will have a notch to accommodate the Lock Channel.**
> - **Tambour Door(s): The Top Universal Panel includes knock-out holes for attaching the tambour door unit. Please identify these Universal Panels prior to installing your unit.**
> - **Double-Hinged Door Set(s): The Top and Bottom Universal Panels required for Double Hinged Doors are different from standard Universal Panels. You can identify the Double-Hinged Door Universal Panels by the three vertical slots in the front face. These holes allow you to attach the top and bottom mounting brackets for the doors. In addition, Vertical Side Frames have knock-out holes used in the installation of Double Hinged Doors. Older models may have pre-punched through holes in the front and rear of the Vertical Side Frame. If you have pre-punched holes in your VSF, ensure that these go at the outside of your doors sections.**
> - **Sliding Door Set(s): If you have a Triple Sliding Door Set, you must install the triple door section on the Right end of the entire Storage Wall. When installing your Universal Panels, plan accordingly.**

Step	Action (Refer to Figure 1-1 and Figure 1-3)
1	Position the Vertical Side Frame with the footplate on the floor and the mounting through holes facing the rear.
2	Place the Floor Universal Panel on the floor with the flat-finished side down, adjacent to the Vertical Side Frame.
3	Attach the Vertical Side Frame to the Floor Universal Panel with 3/8 x 5/8" Hex Head bolts and lock nuts. ***Note: The Floor Universal Panel provides several mounting holes. Use the mounting hole nearest the floor, as shown in Figure 1-3.*** Insert the bolts through the inside slots of the Vertical Side Frames and then into the Universal Panel. • Note for **Double Hinged Door** Applications: Ensure that the three vertical holes punched in the front face of the Universal Panel face **forward** when installing sections that have Double Hinged Doors.
Note: Make sure the Floor Universal Panel is flush with the front of the Vertical Side Frames before tightly securing.	
4	Position the next Vertical Side Frame adjacent to the Floor Universal Panel, making sure the through holes of the Vertical Side Frame are facing the rear. Attach as indicated in Step 3.
Repeat Steps 1 through 4 for each section of Storage Wall.	

Attaching Top Universal Panels

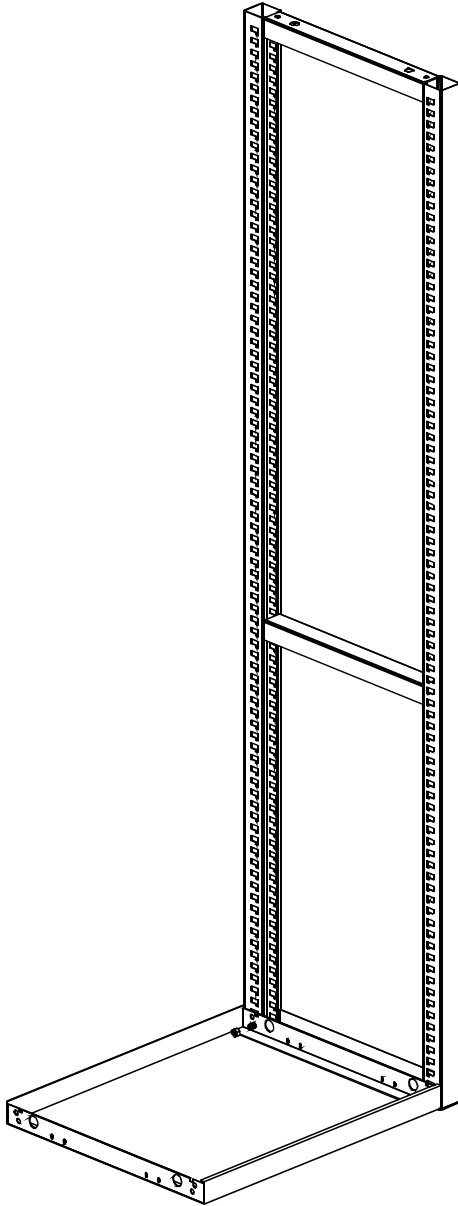| Step	Action (Refer to Figure 1-2)
1	Insert four Shelf Clips into the top inside notches of each Vertical Side Frame to ease the installation of the Top Universal Panel onto the Vertical Side Frames.
2	Place the Top Universal Panel over the Shelf Clips (with the flat-finished side facing *up)* and secure with 3/8" x 5/8" Hex Head bolts and nuts. ***Note: The Top Universal Panel provides several mounting holes. Use the upper mounting hole.*** For appearance purposes, the Top and Floor Universal Panels should be flush with the front of the Vertical Side Frames. • Note for Double Hinged Door Applications: Ensure that the three vertical holes punched in the front face of the Universal Panel face **forward** when installing sections that have Double Hinged Doors. • Note for **Tambour Door** Applications: Ensure that the three vertical holes punched in the front face of the Universal Panel face towards the **rear** of the Storage Wall. There will be knock-out holes on the top surface of the Universal Panel, used to attach the Tambour Door.
Repeat Steps 1 and 2 for each section of Storage Wall.	

Figure 1-1 Floor Universal Panel

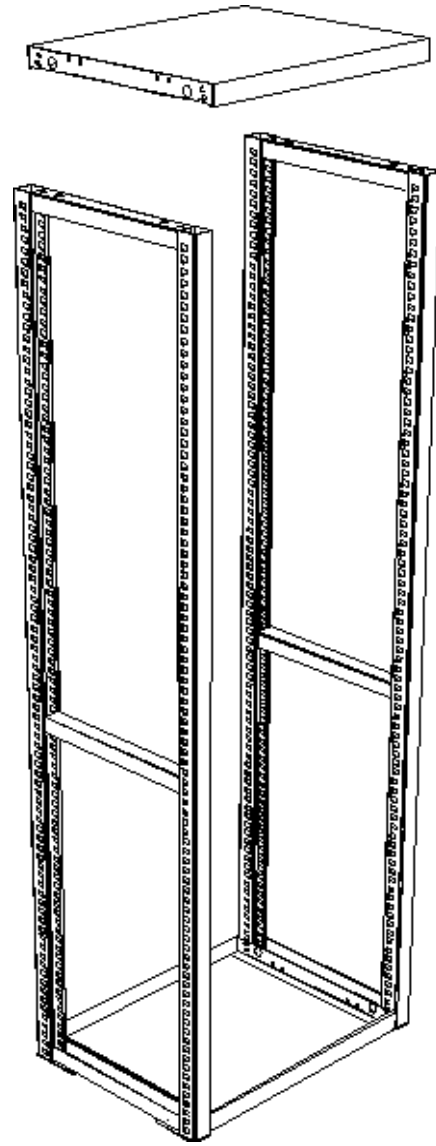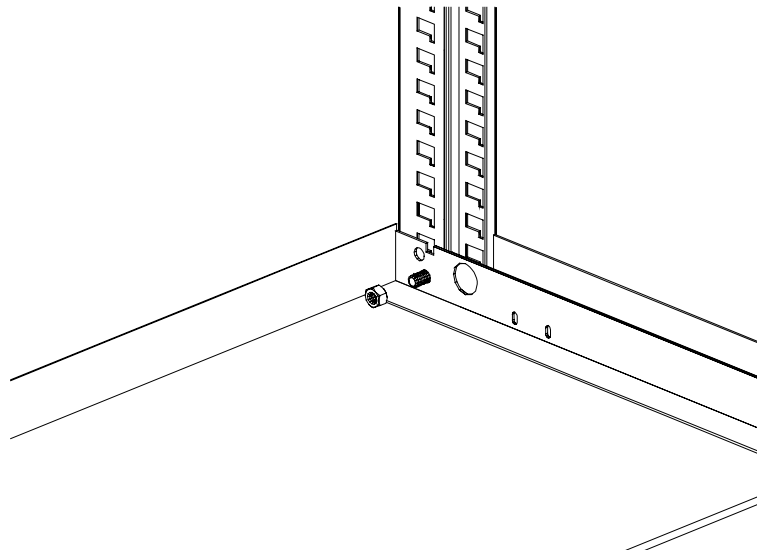**Figure 1-2 Top Universal Panel**

Figure 1-3 Hardware Location

Attaching Rear Panels

If your Storage Wall includes Sway Braces instead of Rear Panels, refer to "Attaching the Sway Braces".

To help identify components in this procedure, note that the Lower Rear Panels are shorter than Upper Rear Panels for the 2200mm Storage Wall. If you're assembling the 2500mm Storage Wall, the Rear Panels consist of three sections; install the smallest section at the top.

Attaching the Lower Rear Panels	
Step	**Action** **(Refer to Figure 1-4)**
1	Align the hole patterns of the Lower Rear Panel with hole patterns on the back of the Vertical Side Frames. Attach using ¼-20 x 5/8" Hex Head bolts inserted through the back of the Rear Panel and into the Vertical Side Frames. Secure with ¼" - 20 Kep nuts.
2	Install the Lower Rear Panel for the next section by overlapping it with the lower Rear Panel of the first section.
Note: To insert the Hex Head bolts easily into overlapped sections, use an awl or screwdriver to align the hole patterns of both panels.	
3	After installing the Lower Rear Panels for the entire Storage Wall, place the Horizontal Support Brackets onto the tops of each Lower Rear Panel. *Make sure the tabs of each Horizontal Support Bracket fit securely over the Lower Rear Panels.*
Attaching the Upper Rear Panels	
Step	**Action** **(Refer to Figure 1-5)**
1	Position the first Upper Rear Panel by sliding it down and into the tabs of the Horizontal Support Bracket. Align the hole patterns of the Upper Rear Panel and Vertical Side Frames. Insert ¼-20 x 5/8" Hex Head bolts through the Upper Rear Panel and into the Vertical Side Frames. Secure with ¼ -20 Kep nuts.
2	Insert the Upper Rear Panel for the next section by sliding it down and into the tabs of the Horizontal Support Bracket. Overlap the Upper Rear Panel with the existing Upper Rear Panel and secure with ¼ x 5/8" Hex Head bolts and ¼ - 20 Kep nuts.
Note: To insert the Hex Head bolts easily into overlapped sections, use an awl or screwdriver to align the hole patterns of both panels.	
3	Attach the Upper Rear Panels for each section in the Storage Wall.
Note: For back-to-back installations with a common Rear Panel, insert ¼-20 x 5/8" Hex Head bolts through the overlapping Upper and Lower Rear Panels and into the Vertical Side Frames. Secure with ¼ - 20 Kep nuts from inside the Storage Wall.	

Attaching the Sway Braces

If your Storage Wall configuration includes Rear Panels instead of Sway Braces, refer to "Attaching Rear Panels." Sway Braces must be installed in the first, last, and *at least* every fourth intermediate Storage Wall section. Secure with ¼-20 x 5/8" Hex Head bolts and nuts, as shown in **Figure 1-6**. For back-to-back Storage Walls, insert the ¼-20x5/8" Hex Head bolts through the bracing and into the Vertical Side Frame on the other side as shown in **Figure 1-7**. Secure with ¼ - 20 Kep nuts.
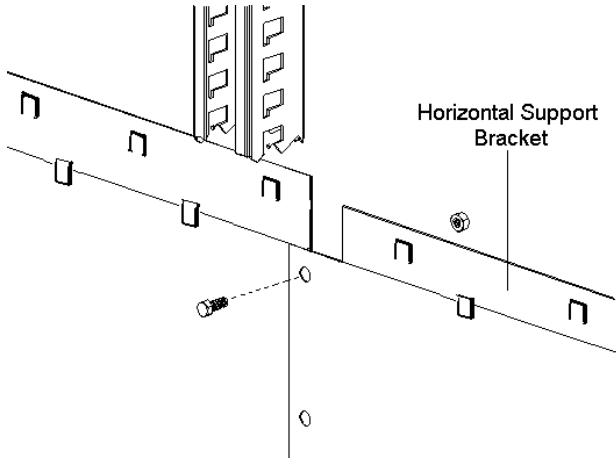
Figure 1-4 Rear Panels
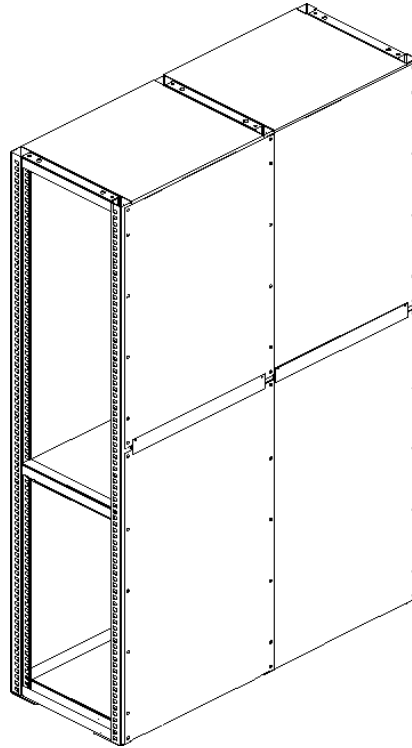
Figure 1-5 Rear Panels (Upper and Lower)

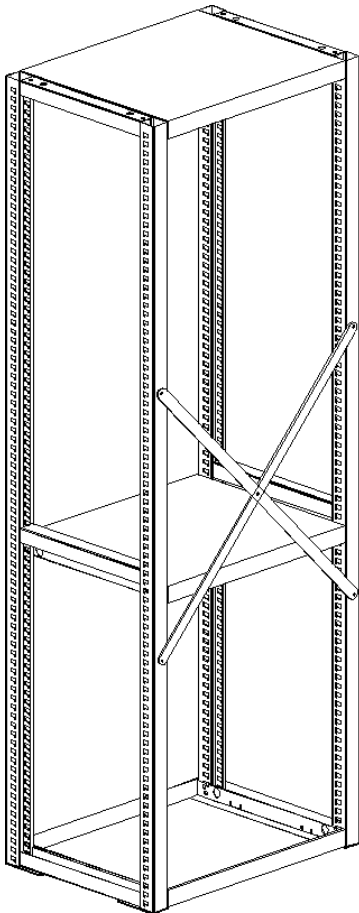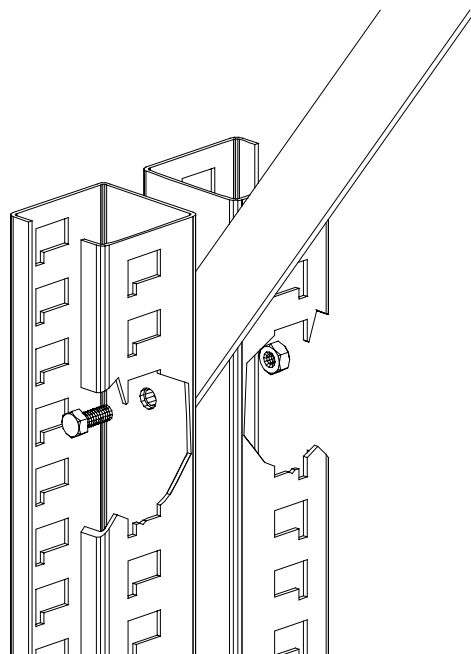Horizontal Support
Bracket

Figure 1-6 Sway Braces

Figure 1-7 Sway Braces (Back-to-Back Storage Walls)

Attaching Center Universal Panels

If your Storage Wall includes a Center Panel, the clearance between the Bottom and Center Panels should be indicated on the drawing you received from your Lista Representative. It is important to install the Center Panel in the position indicated to allow for proper installation of drawers or roll-out trays.
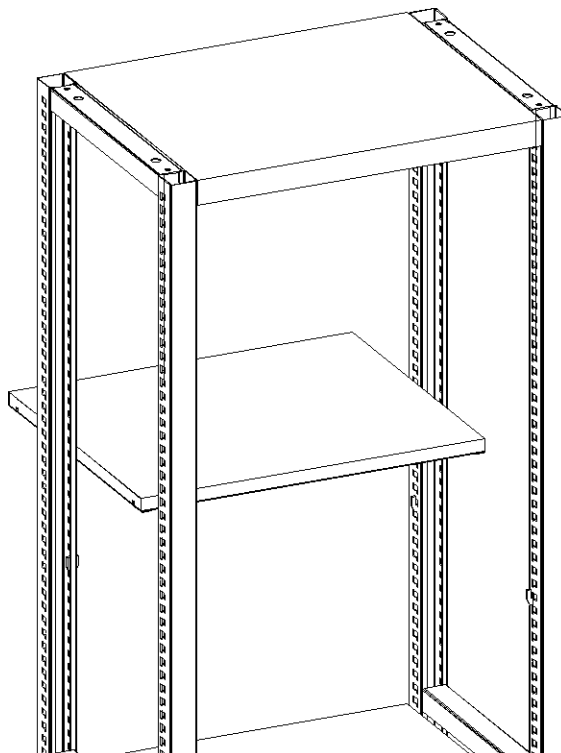
Note: If you are installing a Full-Height Locking System, do not install the Center Locking Panel at this time. This will be done after the Lock Channel is installed.

Most Storage Walls are configured with either 900mm or 1350mm of drawer points. Lista marks these heights with oblong-shaped notches on the front and back of each Vertical Side Frame. Position the Center Panel so that its bottom edge covers the top half of the appropriate notch unless indicated otherwise in your drawing.

Refer to your unique Storage Wall drawing (supplied by Lista) to determine the height of the drawer points for your specific installation. For example, if your drawing indicates 750mm of drawers within an individual section, the drawers will occupy 30 total slots (30 x 25mm), each slot equaling 25mm. Measure from the Floor Universal Panel up to determine the correct height for which the Center Universal Panel should be installed.

Step	Action	(Refer to Figure 1-8)
1	Insert four Shelf Clips into the notches of the Vertical Side Frames at the proper height and place the Center Universal Panel down over the Shelf Clips. Secure using four 3/8 x 5/8" bolts and nuts (one for each corner of the Center Universal Panel). Hand-tighten. (All hardware should be tightened before installing drawers and trays).	
Note: If your Storage Wall includes a partial lock system, install the Center Universal Panel so that the hole for the cylinder lock faces the front of the Storage Wall.		
2	For appearance purposes, push the Center Universal Panel as far back as possible so that it is flush with the Vertical Side Frames. Make sure the section is level.	
Repeat Steps 1 and 2 for each section of Storage Wall, as needed.		

Figure 1-8 Center Universal Panel
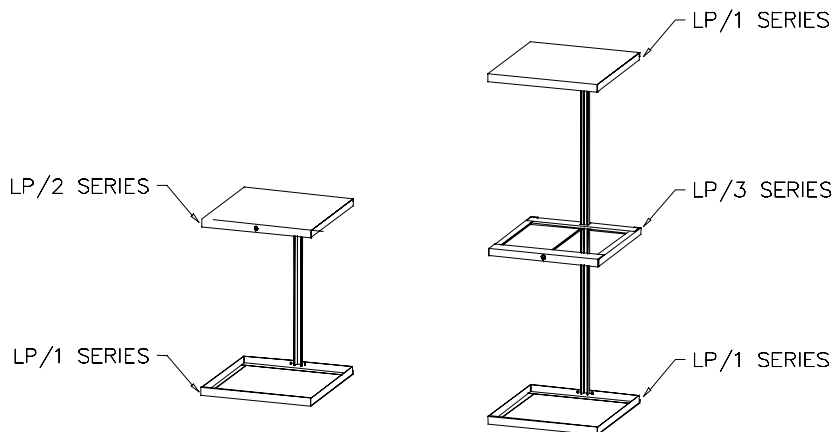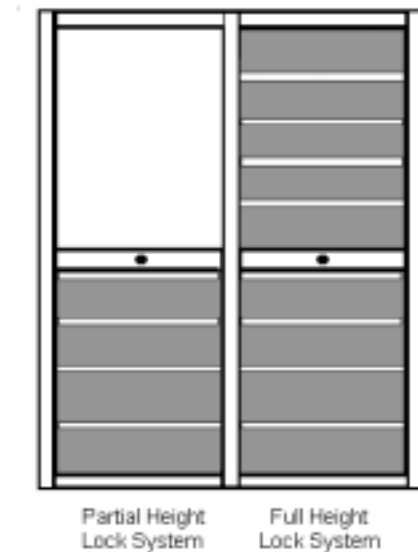
Installing the Lock System

Lista offers two types of Locking Systems: Full and Partial Height. The *Partial Height* locking system provides security and accessibility for a section of drawers, as shown. The *Full Height* locking system spans the entire section of the Storage Wall to provide security for all drawers, top to bottom. The locking system incorporates a *shuttle* for locking the entire set of drawers or allowing the drawers to be opened one at a time. When the shuttle is moved to the right, the entire set of drawers is locked. When the shuttle is moved left, the entire set of drawers is unlocked. However, when one drawer is opened, the shuttle returns to the right which locks the remaining drawers until the open drawer is closed.

Types of Lock Systems

The following table provides a description of the types of locking systems available.

Type of Lock	Description
Single Lock for Partial Height	Locks all drawers below the Locking Panel within one individual section of the Storage Wall. It consists of one cylinder lock (mounted to the Locking Panel) and two keys.
Single Lock for Full Height	Locks all drawers from top to bottom within one individual section of the Storage Wall. It consists of one cylinder lock (mounted to the Locking Panel) and two keys.

Figure 1-9 Types of Lock Systems

Partial Height
Lock System

Full Height
Lock System

LP/1 SERIES

LP/2 SERIES

LP/3 SERIES

LP/1 SERIES

LP/1 SERIES

Installing a Full or Partial Height Locking System

The following table provides step-by-step instructions for installing Partial and Full Height Locking Systems. Refer to the Lock system for your Storage Wall. **Note: For instructions on installing the U-Tracks, refer to "Installing Full Suspension Drawers and Trays" on page 1-14.**

Installing the Partial Height Lock Channel	
Step	**Action** (Refer to Figure 1-11)
1	With the U-Tracks for the drawers installed, position the Lock Channel into the back of the bottom Fixed Panel (FP1) and Top Locking Panel (LP2). *Note: The Plastic Pivot assembly should be on top.*
2	Viewing the Storage Wall from the front, loosely secure the Mounting Brackets to the rightmost hole patterns (2nd and 4th) in the Center and Floor Panels using ¼" x ½" Round Head screws and ¼" - 20 Kep nuts. Insert the screws through the Mounting Brackets and into the Panels. Loosely secure with Kep nuts from the back of the Storage Wall.

Note: Do not fully tighten the screws at this time.

Installing the Full Height Lock Channel	
Step	**Action** (Refer to Figure 1-10)
1	With the U-Tracks for the drawers installed, position the Lock Channel into the back of the Top Locking Panel (LP2) and bottom Fixed Panel (FP1). Insert the Center Lock (Universal) Panel at the desired height, making sure the hole which accommodates the cylinder lock faces the front of the Storage Wall.
2	Viewing the Storage Wall from the front, loosely secure the Top and Floor Mounting Brackets to the rightmost hole patterns (2nd and 4th holes) in the Top and Floor Panels using ¼" x ½" Round Head screws and ¼" - 20 Kep nuts. Insert the screws through the Mounting Brackets and into the Panels. Loosely secure with Kep nuts from the back of the Storage Wall.

Note: Do not fully tighten the screws at this time.

3	You'll notice a series of double-hole patterns in the middle of the Lock Channel for mounting the Lock Channel to the Center Lock Panel. Locate the hole patterns nearest the Center Lock Panel and install the Center Mounting Bracket using two ¼"x ½" Round Head screws and ¼" - 20 Kep nuts.

Aligning the Lock Channel with the Drawers	
Step	**Action**
1	Install a drawer near the top and bottom of the Lock Channel, leaving enough room to access the Lock Channel Mounting Brackets. The camplates of the Drawer should fit snugly around the Lock Channel.

Note: Occasionally, the drawer's camplate may interfere with the Lock System's shuttle. If this happens, loosen the Mounting Bracket screws and slide the Lock Channel up or down until the camplate no longer touches the shuttle. Re-tighten the Mounting Bracket screws.

2	Tighten the mounting bracket screws securely.

Assembling and Attaching the Cylinder Lock	
Step	**Action** (Refer to Figure 1-12)
1	Insert the Locking Rod into the Rotor and snap the Rotor assembly into the Plastic Pivot Bracket on the Lock Channel.
2	Insert the Cylinder Lock into the hole in the front of the Center Lock Panel.
3	Insert the end of the Aluminum Locking Rod into the Cylinder Lock assembly and attach the spring clip onto the lock cylinder.

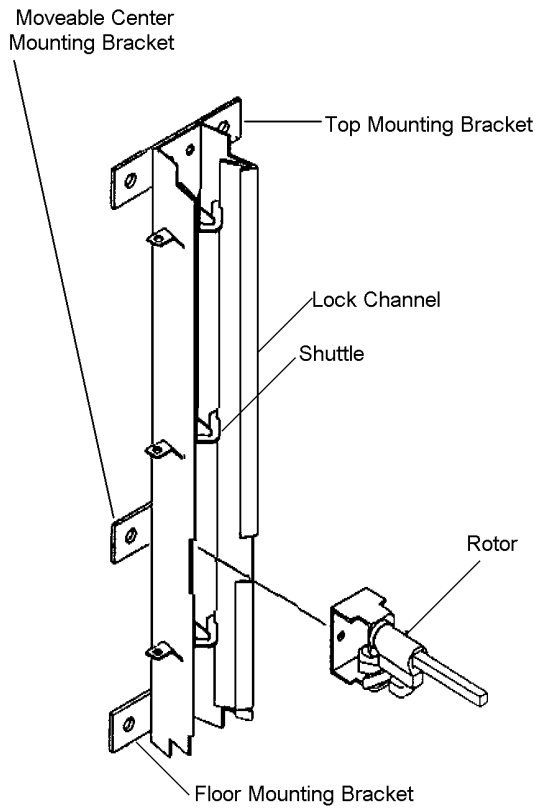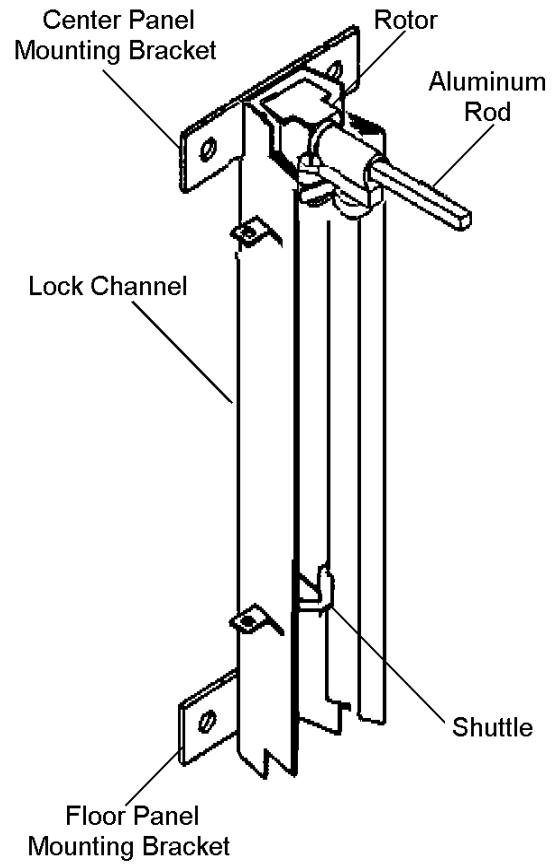| Inserting the Drawers or Roll-Out Trays	
Step	**Action** (Refer to Figure 1-13)
1	Hold the Drawer (or Roll-out Tray) at an angle with the Suspension Frame up to prevent it from sliding, and insert the Suspension Frame into the U-Track. With the Drawers installed, check the lock system to ensure it works properly.

Figure 1-10 Full Height Lock System

Moveable Center Mounting Bracket
Top Mounting Bracket
Lock Channel
Shuttle
Rotor
Floor Mounting Bracket

Figure 1-11 Partial Height Lock System

Center Panel Mounting Bracket
Rotor
Aluminum Rod
Lock Channel
Shuttle
Floor Panel Mounting Bracket

Figure 1-12 Cylinder Lock Assembly

LOCKING ROD
CYLINDER LOCK
KEY
SPRING CLIP

Figure 1-13 Drawer

Right U-Track
Drawer
Left U-Track
Suspension Frame

Installing End Panels

Step	Action (Refer to Figure 1-14)
1	Install two Shelf Support Clips, (in the lower back and front of the Vertical Side Frame) one slot up from the bottom.
2	Install two Shelf Support Clips (in the upper back and front of the Vertical Side Frame) one slot down from the top.
Note: If your Storage Wall is over 2500mm high, you should also place two additional Shelf Support Clips in the center of the Vertical Side Frames for added support.	
3	Position the End Panel a few inches above the Vertical Side Frame and push the End Panel against the frame, sliding it down over the Shelf Support Clips.
4	Install a 5/16 x 5/8" Allen Cap bolt and nut into the holes at the top of the inside End Panel to prevent the panel from sliding up. The lip of the End Panel rests on the head of the Allen Cap bolt for added protection.

Installing Fill-In Strips

Fill-In Strips are used to eliminate open space between two shelves, providing a continuous smooth surface.

Step	Action (Refer to Figure 1-15)
1	Install two horizontal wire clips into the slots on the side of each shelf (one at the back and front, as shown).
2	Place the Fill-In Strip on top of the clips.
Note: You can also install Fill-In Strips on the top of the Vertical Side Frames. Horizontal Wire Clips are not necessary, simply place the Fill-In Strip between the two Vertical Side Frames.	

Installing Wide Span Beams Sets

Lista offers three different lengths of Wide Span Beams for storage of items greater than the length of a single Storage Wall section. The lengths are: 56 ¼" for spanning two 36U sections; 80 5/16" for spanning two 54U sections, and 84 3/8" for spanning three 36U sections. Refer to the drawing provided by your Lista Representative to determine the appropriate length for installing Wide Span Beams on your Storage Wall.

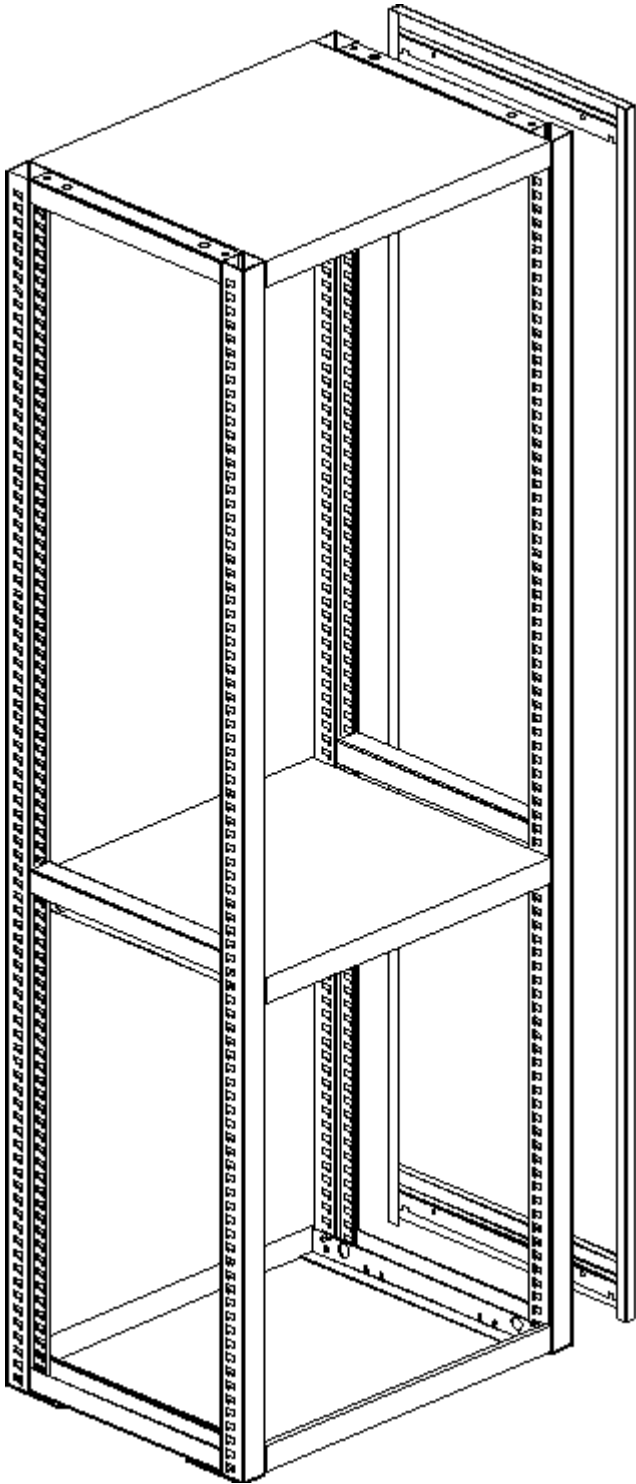| Step	Action (Refer to Figure 1-16 and Figure 1-17)
1	Attach the four Anchoring Clips to each Vertical Side Frame (two in front, two in back). Make sure the tabs of the clips are seated firmly in the slots of the Vertical Side Frames and that all Clips are mounted at the same height.
2	Slide the Wide Span Beams down over the Anchoring Clips.

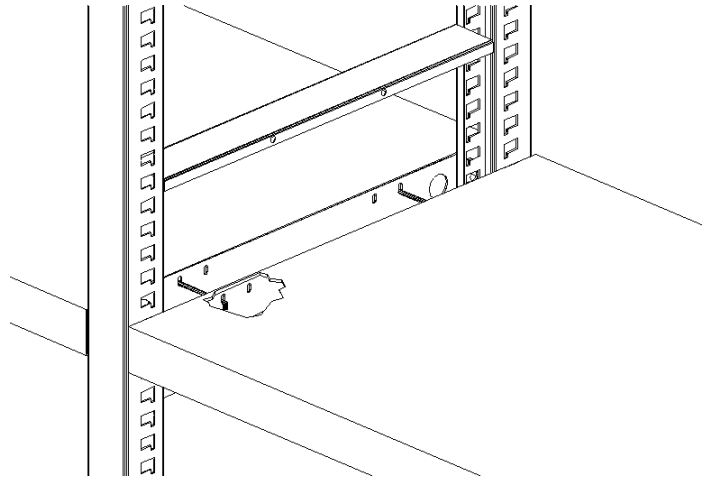**Figure 1-14 End Panel**

Figure 1-15 Fill-In Strips
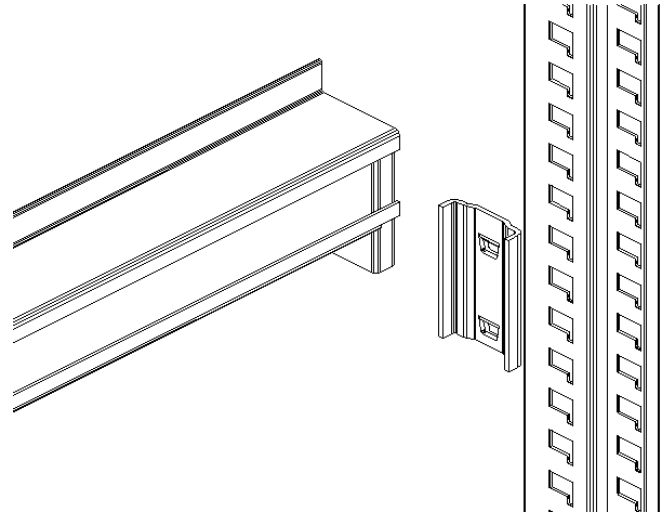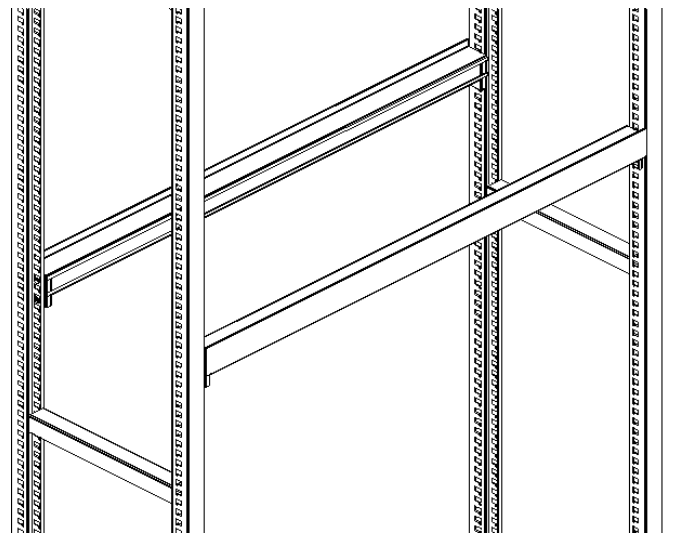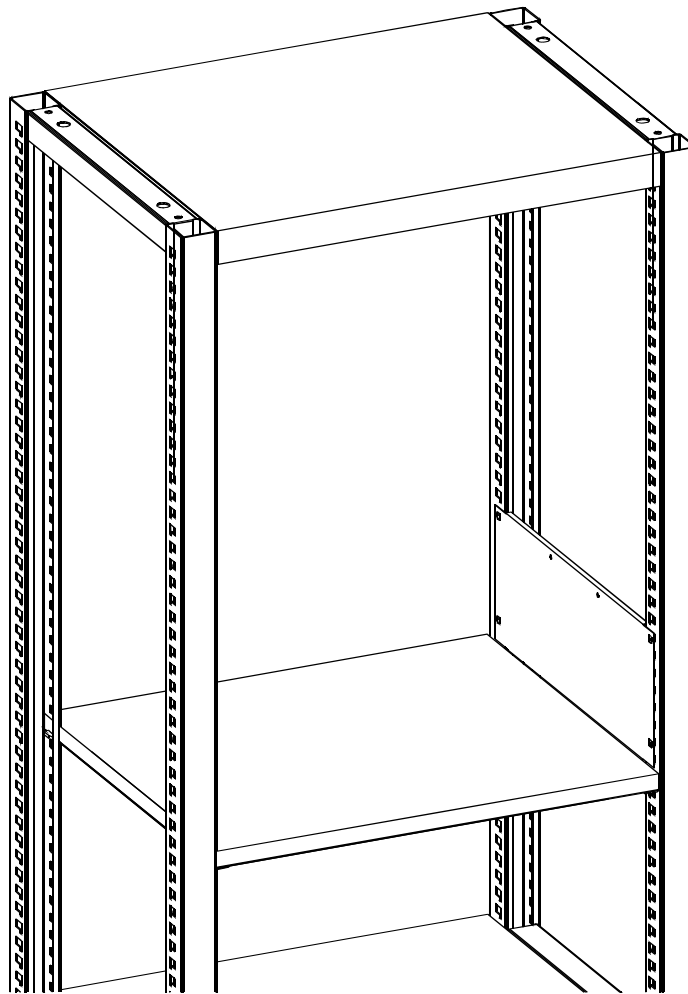
Figure 1-16 Beam Anchoring Clip

Figure 1-17 Wide Span Beam Sets

Installing Adjustable Shelves and Shelf End Panels

Step	Action (Refer to Figure 1-18)
1	Place four Shelf Support Clips (one for each shelf corner) into the desired location of the Vertical Side Frames. Make sure all the clips are at the same height. Position the clips with the wider (offset) part of each clip facing the inside.
2	Install the shelf by slanting it down at an angle and securing one side (the left or right), then guide the other side of the shelf down over the remaining clips.
3	To install the Shelf End Panels, simply insert the tabs of the Shelf End Panel into the slots of the Vertical Side Frames so that the Shelf End Panel is perpendicular to the Shelf, as shown.

Figure 1-18 Adjustable Shelf and Shelf End Panels

Installing the Bookcase

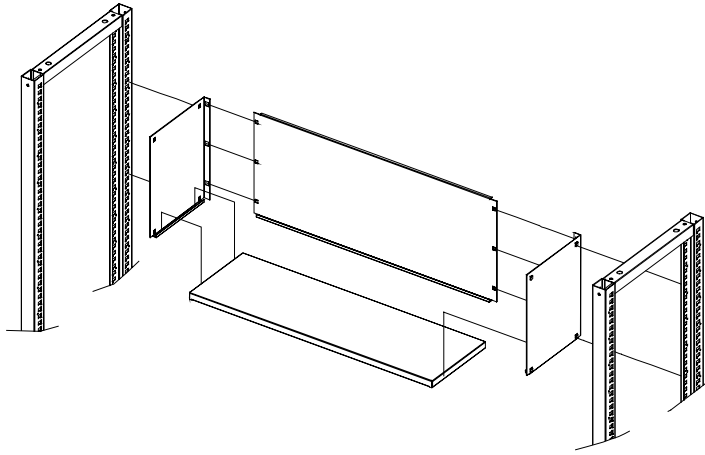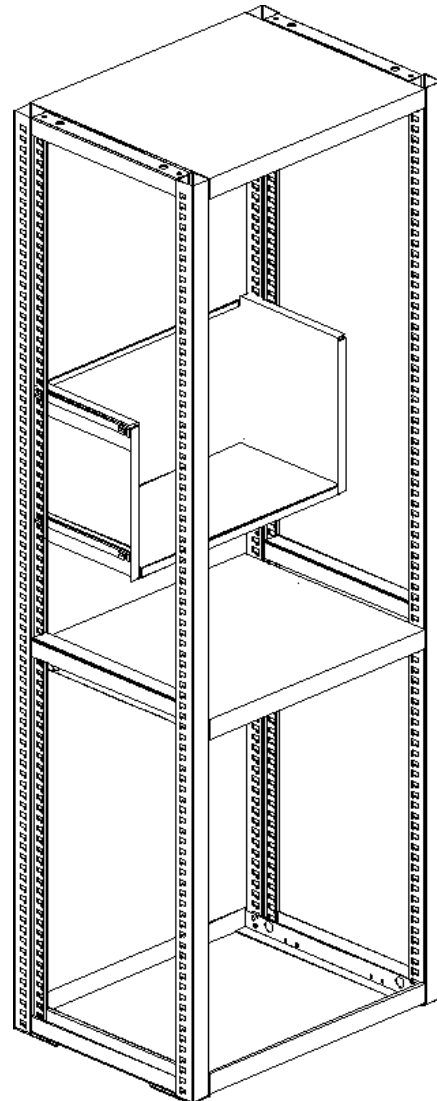| Step | Action | (Refer to Figure 1-19 and Figure 1-20) |
|------|--|
| 1 | Each bookcase side panel includes four tabs which fit into the notches of the Vertical Side Frame. To install the bookcase: |
| | • In the back of the storage wall unit, attach the rear tabs of the side panels to the inside notches on the back Vertical Side Frames. |
| | • In the front of the storage wall unit, attach the front tabs of the side panels to the inside notches on the front Vertical Side Frames. |
| 2 | With both side panels installed, insert the lances of the back panel into the tabs of each of the side panels. |
| 3 | Drop the bottom shelf onto the bottom flanges of the back and side panels and press firmly into place. |

Figure 1-20 Bookcase (Installed)

Figure 1-19 Bookcase Assembly

Installing Full Suspension Drawers and Trays

Before installing full suspension drawers or trays, make sure all the hardware in the Storage Wall is fully tightened.

Full Suspension Drawers or Roll-Out Trays consist of the following components:

- Drawer or Roll-Out Tray
- U-Tracks, Left and Right
- Suspension Frame
- Safety Clips

Caution: Wear gloves when handling the U-Tracks.

Each U-Track occupies three slots of Vertical Side Frame, or 75mm (3 x 25mm).

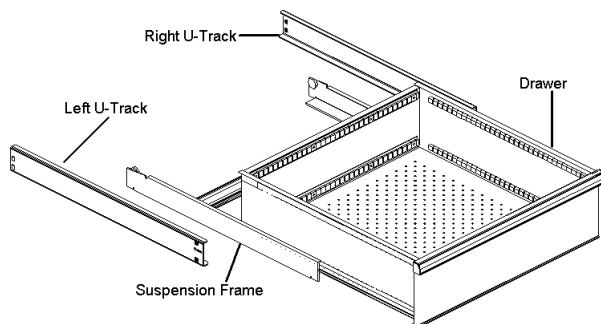| Step	Action (Refer to Figure 1-21 and Figure 1-22)
1	Hold the U-Track so that the tabs are in front and the prongs are in back. Each U-Track is stamped with an L (for Left) or an R (Right). Install each U-Track in the proper mounting slot in the rear, making sure the tabs in front are firmly seated.
2	Press a Safety Clip (with the points facing *out)* into the front notches on both the left and right Vertical Side Frames to lock the U-Track into place.
Note: If the Safety Clip doesn't seem to fit properly, it indicates that the U-Track is not firmly seated in its mounting slot. If you need to remove the Safety Clip, gently tap it with a screwdriver.	
If you are installing a full or partial locking system, refer to page 1-7 for installation instructions. You must install the lock system before inserting the drawers or roll-out trays. If you are NOT installing a Locking system, proceed to Step 3.	
3	Hold the Drawer or Roll-Out Tray at an angle with the Suspension Frame up to prevent the Suspension Frame from sliding. Insert the Drawer or Roll-Out Tray with the suspension frame into the U-Tracks.

Figure 1-22 U-Track and Safety Clip

Figure 1-21 Drawer with Suspension Frame