



# SURESLIDE® SLIDE-OUT OEM INSTALLATION MANUAL

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## Introduction

The Lippert SureSlide® Slide-out System is a rack-and-pinion style slide system. It uses dual 12V DC electric gear motors to extend and retract the slide room.

For additional support on this product, go to: <https://support.lci1.com/sureslide-slide-outs>

**NOTE:** Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

## Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels. This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

### **WARNING**

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **WARNING**

Always make sure that the slide-out room path is clear of people and objects before and during operation of the slide-out. Always keep away from the gear racks when the room is being operated.

### **WARNING**

Do not service the slide-out system unless the battery is disconnected. Failure to do so may result in death or serious personal injury.

### **WARNING**

The SureSlide® Slide-out System is intended for the sole purpose of extending and retracting the slide-out room. It should not be used for any purpose other than to actuate the slide-out room. To use the system for any other purpose may result in death, serious injury, or damage to the unit.

### **CAUTION**

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

### **CAUTION**

Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

### **CAUTION**

Moving parts can pinch, crush, or cut. Keep clear and use caution.

## Structural Requirements

**NOTE:** Slide mechanism is not intended to provide structural integrity for the slide room box or slide room opening.

### Support

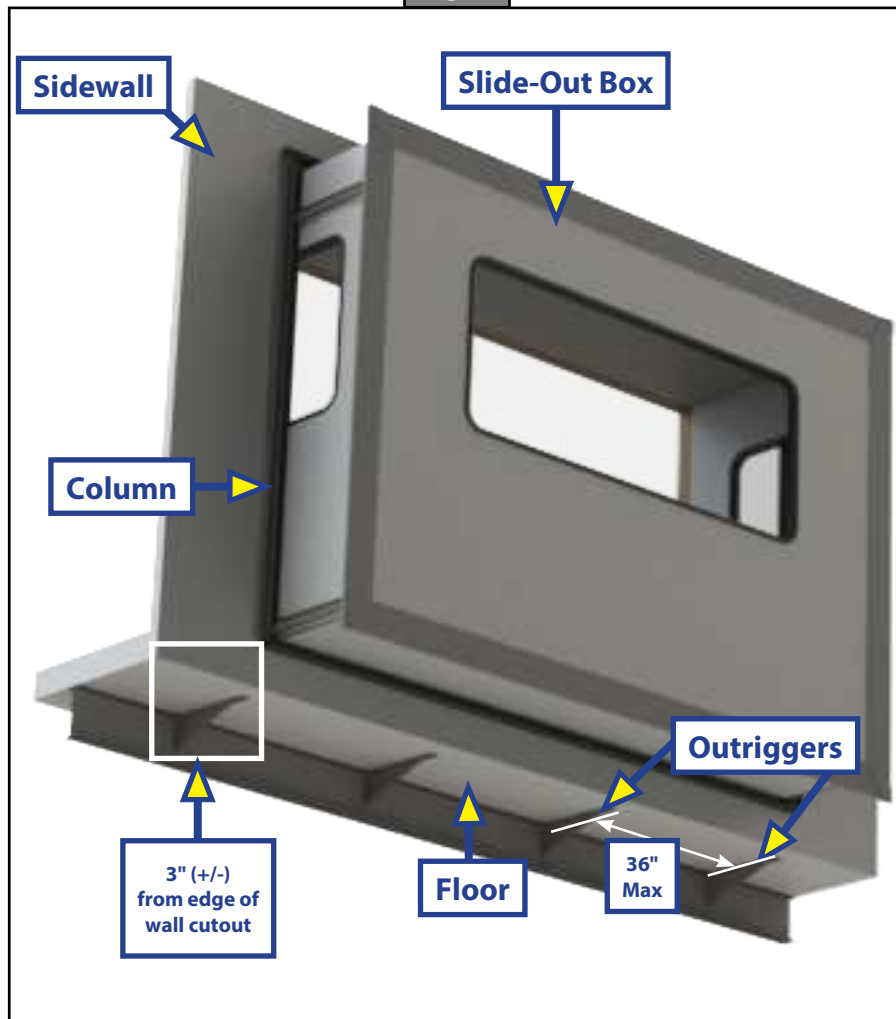
Additional support must be added for any applications that may cause the structure to deviate from square, i.e., rooms with overhangs, large rooms or rooms with heavy appliances. The floors must be supported at all points. The inside edge of the room must be supported by rollers, wear bars or wooden toe kicks wrapped in carpet.

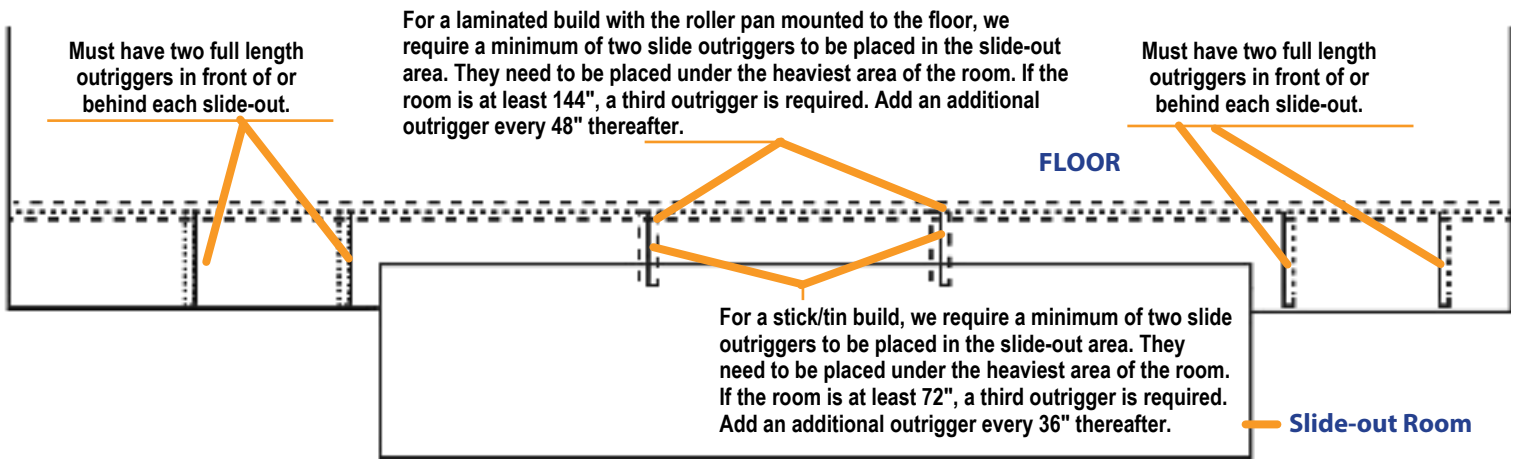
### Outrigger Placement

For units with the roller pan mounted to the floor, a minimum of four outriggers will be required.

- A. One outrigger must be at each end of the slide room within 3" (76mm) (+/-) (depending on wheel locations) (Fig. 1) from the edge of the wall cutout of the unit.
- B. Two others spaced evenly under the room, but no more than 36" (914mm) apart from any other outrigger.
- C. Add additional outriggers as needed to maintain the 36" (914mm) maximum spacing.

**Fig. 1**

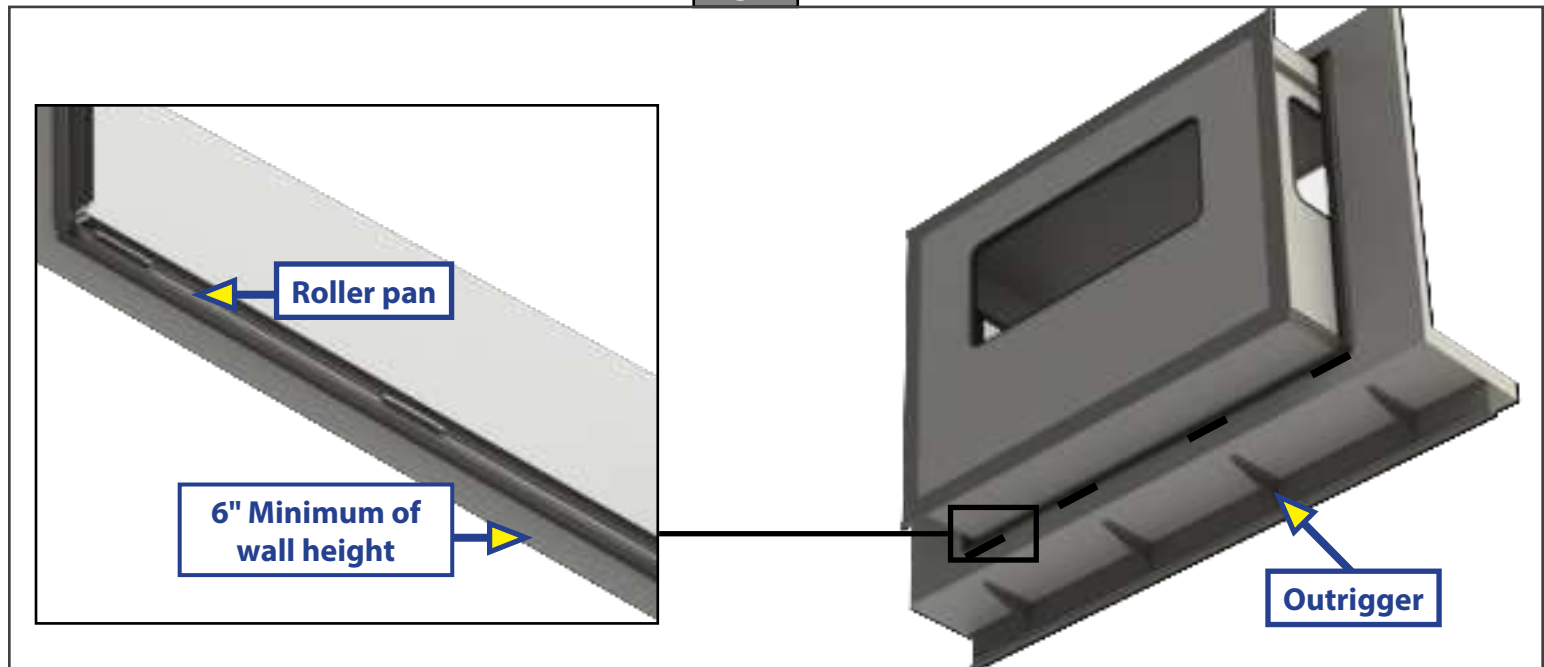




#### In-wall floor slide-out outrigger guidelines for stick and tin/hung glass and laminated sidewalls:

- For laminated builds where there is at least 6" of wall structure and rollers are mounted on the wall, only standard outrigger placement will apply every 48".
- If you have a 12 CU. FT. or larger refrigerator in a slide-out, you are required to have two slide outriggers centered under that section of the slideout, spaced no closer than 12" and no further than 36". If refrigerator is near tires, both outriggers need to be placed as close as possible to the refrigerator without causing tire interference. All other slide-out outrigger spacing is still applicable.
- For slide rooms with the roller pan mounted to the wall (Fig. 2) the outrigger placement is the same as described when the roller pan is mounted on the floor. For laminate structures, 6" (152mm) of wall height is recommended beneath the slide room (or adequate structure for support). For stick and tin construction, continuous support is needed for the header and footer for adequate support.

Fig. 2



**Square**

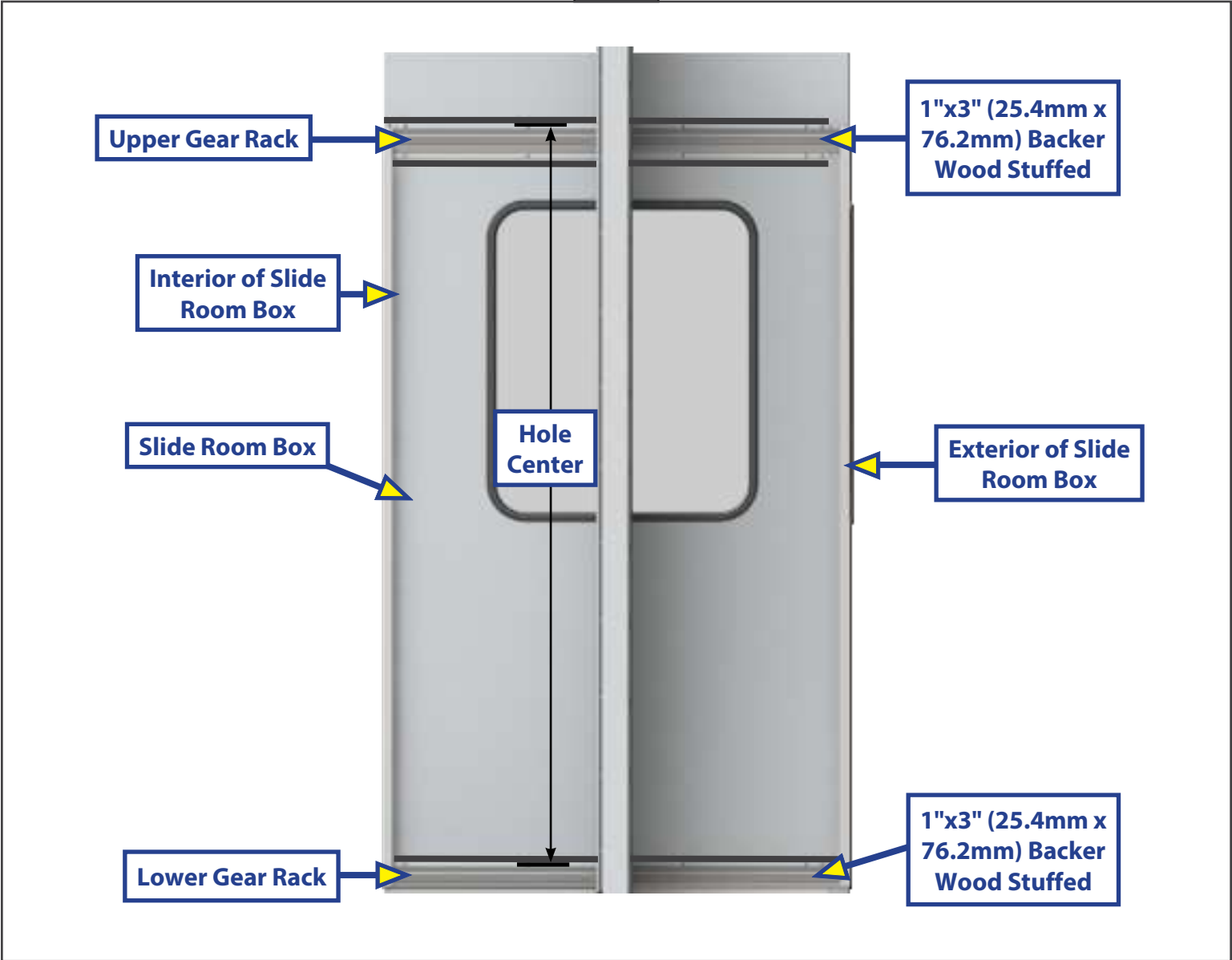
The slide wall opening and the slide box (each) must not be out of square more than 1/4" (6.3mm) in any direction. The corner to corner diagonal dimensions on the slide room opening or the slide room box must not differ by more than 1/4" (6.3mm).

**Backers**

Backers are to be incorporated into slide room construction, positioned where the SureSlide® gear racks will be mounted. Lippert recommends the backers be a 1" x 3" .055" (25.4mm x 76.2mm 1.5mm) aluminum that is wood stuffed. See diagram (Fig. 3) of slide room with backers. The backers do not need to be stuffed with wood if the aluminum wall thickness being used is at least .125". Backer location is determined by hole center from the slide system. Measure from the top of the bottom rack to the top of the top rack.

Wall Backer Specifications	
Thickness	Structure
Greater than or equal to .125" (3.2mm)	Non Stuffed
Less than .125" to .055" (3.2mm to 1.4mm)	Stuffed
Less than .055" (1.4mm)	Not Approved

**Fig. 3**



## Prior to Installation

### Resources Required

- Cordless or electric drill or screw gun
- Appropriate drive bits
- #10 screws
- Glue per seal supplier specification

### Inspect Slide-out Mechanism

1. Check the back side of the each gear rack to ensure there is foam tape running the entire length of the gear rack and that the paper backing has been removed from the foam tape. (Figs. 4A and Fig. 4B).

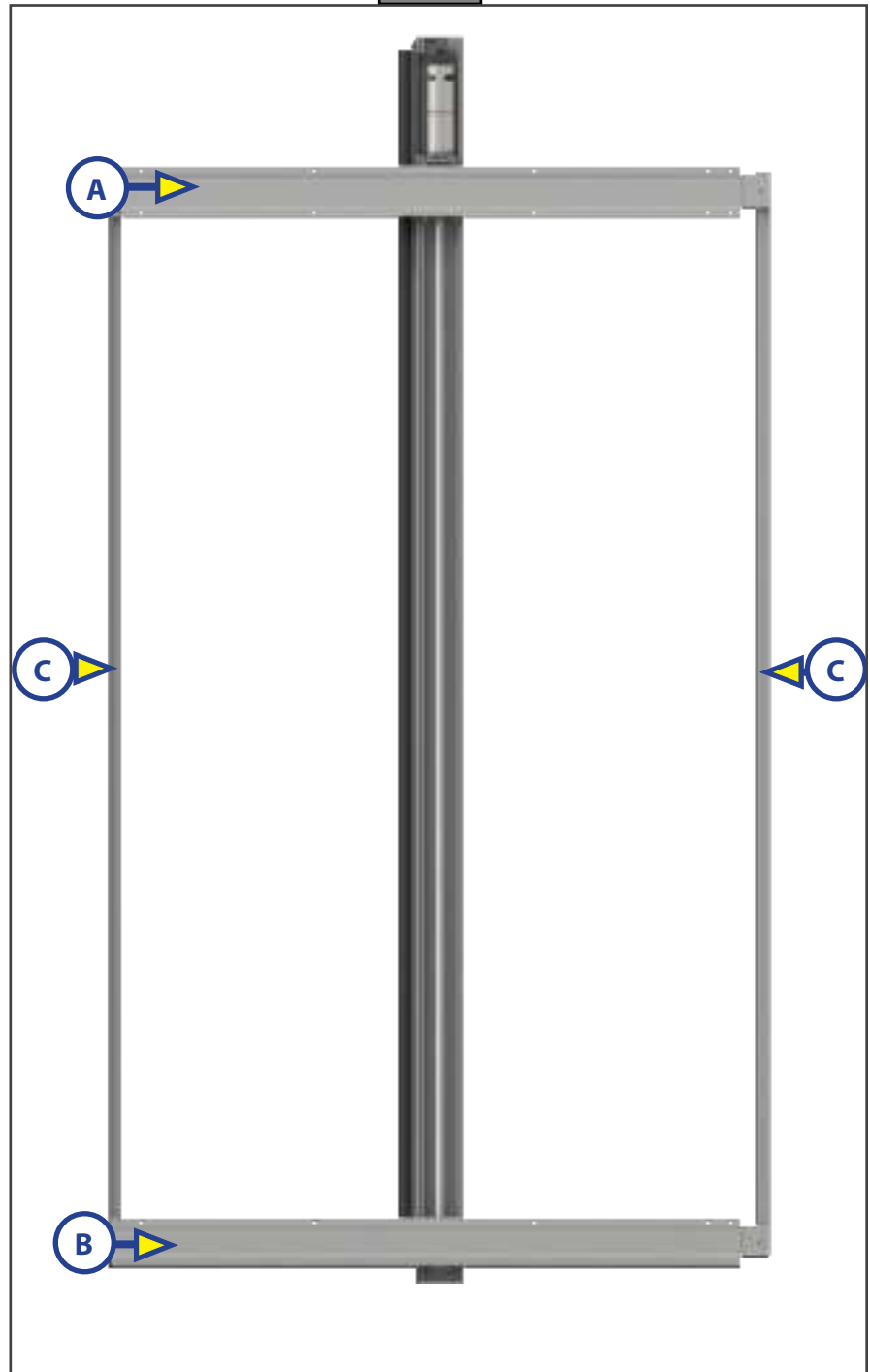
**NOTE:** Foam tape removed from racks for clarity.

**NOTE:** SureSlide® assemblies are shipped with shipping angles (Fig. 4C) to keep the gear racks parallel and to assist with the installation process. Do NOT remove shipping angles until the gear racks and fascia have been installed on the slide-out box. Premature removal of the angles results in misaligned racks.

**NOTE:** SureSlide® assemblies will have attached shipping angles that permit installation of exterior slide room T-molding without removal of the angles. The width of the vertical exterior shipping angle leg does not extend past the gear rack flange. Installers can place the exterior shipping angle flush against the inside of the T-molding and the lower gear rack flange while squaring up to the bottom of the slide box.

**NOTE:** The mounting surface of the T-molding cannot exceed 1 5/8" so as not to interfere with the gear rack being mounted flush to the side of the slide out box.

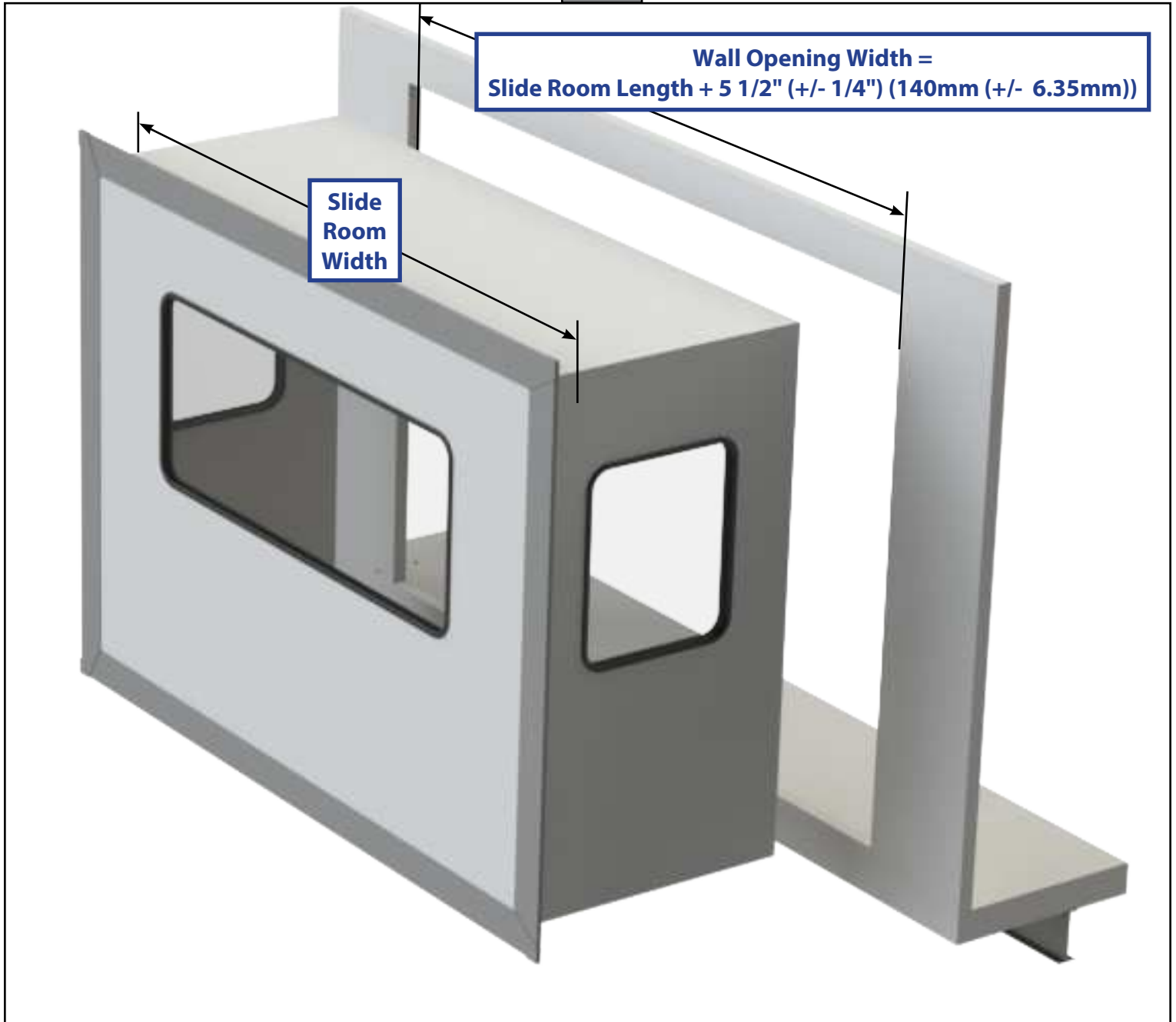
Fig. 4



## Slide Room Opening Inspection

1. Measure the slide room width and the wall opening (Fig. 5). The wall opening must be 5 1/2" (140mm) wider than the actual slide room measurement. Do not attempt to install the slide room in the wall opening if this dimension is more than 5 3/4" (146mm) or less than 5 1/4" (133mm).

Fig. 5



## Slide Room Inspection Height Dimension Measurement

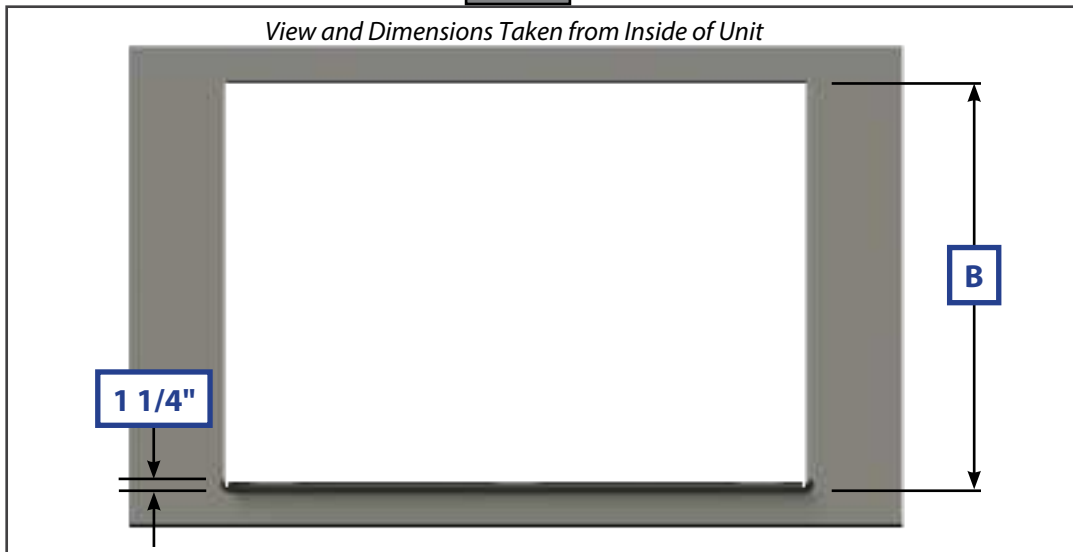
The dimensions below are needed to correctly determine room height for slide room inspection.

**A** - Roller pan height is 1 1/4" (Fig. 6).

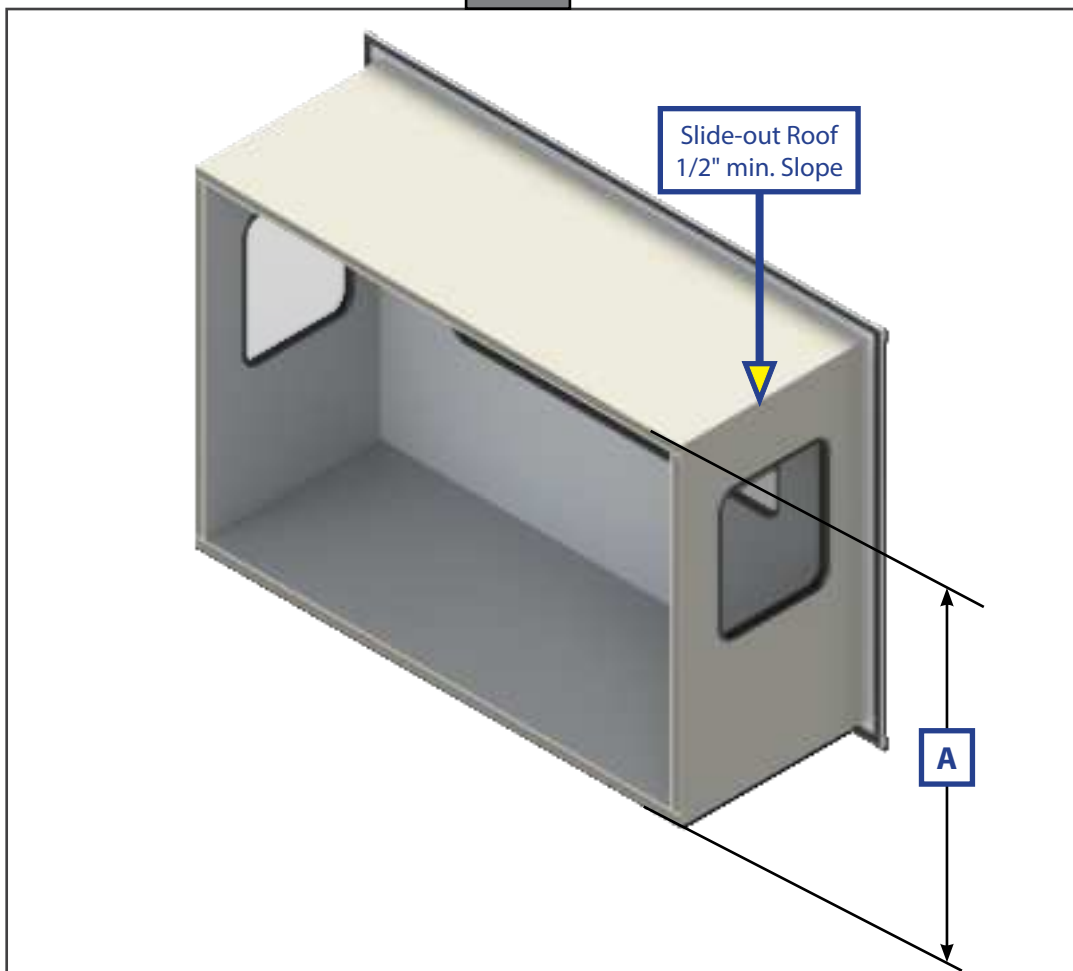
**B** - Slide opening height in the unit sidewall (Fig. 6B) should be equal to the roller pan height (1 1/4") + height of slide box + a minimum 1 1/4" gap at the top.

**C** - Height of slide box (measure from tallest point on top of roof to bottom of slide floor) (Fig. 7A).

**Fig. 6**



**Fig. 7**

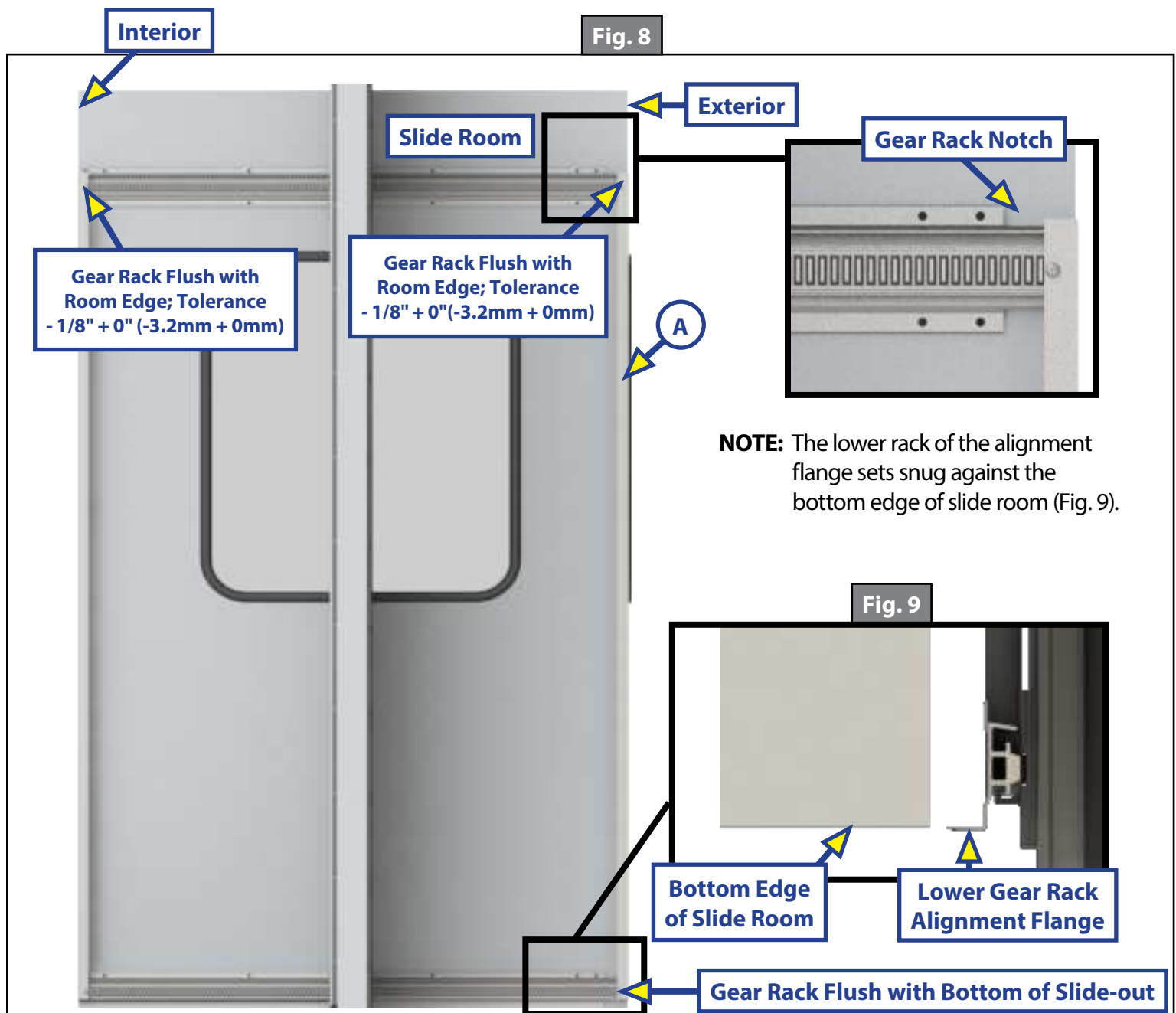


## Installing Slide Mechanism to Slide Room

**NOTE:** The gear rack notch must be toward the exterior of the slide box and the flange of H-column will be to the exterior of the unit (Fig. 8).

**NOTE:** The mounting surface of the T-molding cannot exceed 1 5/8" so as not to interfere with the gear rack being mounted flush to the side of the slide out box.

1. Place the Left assembly against the left-hand side wall of the slide room (Fig. 8) while facing the unit from the outside.
2. Hook the lower gear rack installation alignment flange on the bottom of the slide-out (Fig. 9).
3. Place the installation alignment flange at the exterior shipping angle flat to the exterior of the slide room (Fig. 8A). Always align the slide-out assembly to the exterior and bottom of the slide room. At this point the system can be adjusted to a tolerance of  $-1/8''/+0''$  ( $-3.2\text{mm} / + 0\text{mm}$ ) at the interior and exterior to center the system on the wall. The gap at the interior or exterior should be no more that  $1/16''$  (1.6mm) variance from the top gap to the bottom gap on the same end of the slide room wall.



4. While maintaining alignment with the bottom and exterior of the slide room, attach the lower gear rack to the side of the slide room with #10 screws (Fig. 10). The lower gear rack will only have screw holes above the track of the gear rack. Screws should be installed secure and level.
5. While maintaining alignment with the bottom and exterior of the slide room, attach upper gear rack to the side of the slide room with #10 screws (Fig. 11). The upper gear rack will have screw holes above and below the track of the gear rack.
6. Remove the exterior shipping angle from the gear racks.
7. Repeat steps 1 through 4 for attaching the Right assembly to the right-hand side of the slide room while facing the unit from the outside.
8. Measure the hole center distance (Fig. 3) between the upper and lower gear racks at each end to make sure the racks are parallel.

**NOTE:** A more common practice is to hook the tape measure in the shoe track of the upper gear rack and then measure to a similar point at the lower gear rack.

9. Attach the exterior slide room T-molding, if not already installed.

**NOTE:** Once the T-molding has been installed, the slide room is ready to be installed into the wall opening.

Fig. 10

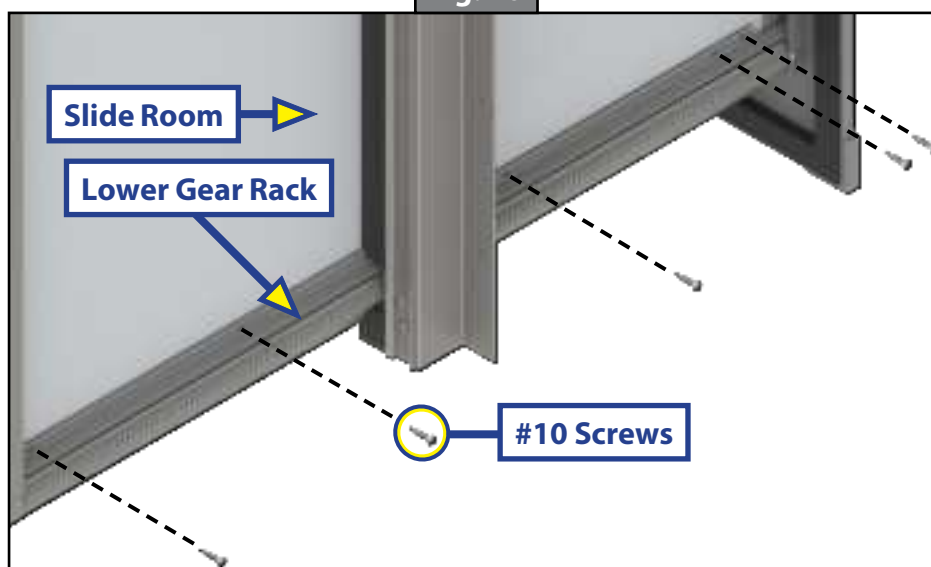
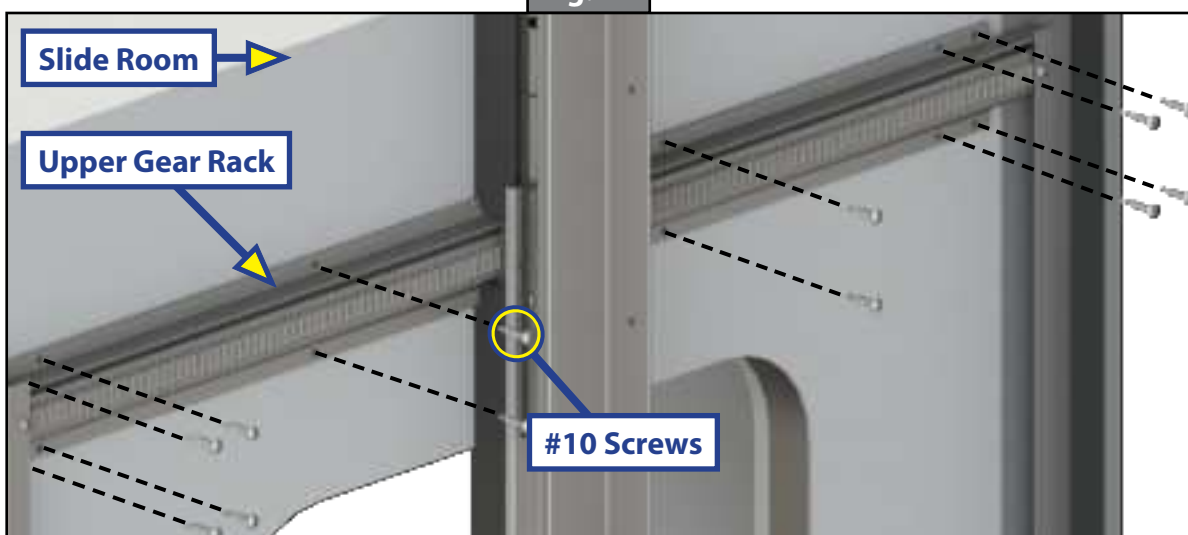


Fig. 11



## Prepare Wall Opening for Slide Room Installation

1. Prepare upper outer wall surfaces (Fig. 12A) according to seal manufacturer's requirements to clean and prepare the area for complete adhesion of sealant.
2. Install upper wipe seal according the seal manufacturer's guidelines.

**NOTE:** Corners must be at 90° with no obstructions.

3. Remove paper backing from the mylar tape on the corner cups.
4. Install corner cups to roller pan (Fig. 13) and ensure that the overall length of the pan and cups is correct to the rough opening.
5. Using #8 screws, install the roller pan to the bottom of the opening (Fig. 14), making sure the roller pan is centered in the opening.

Fig. 12



Fig. 13



Fig. 14



## Slide Room Installation

1. Insert the completed slide room into wall opening, taking care to center "H" columns within the opening.

**NOTE:** "H" columns must be fully seated in the roller pan (Fig. 15).

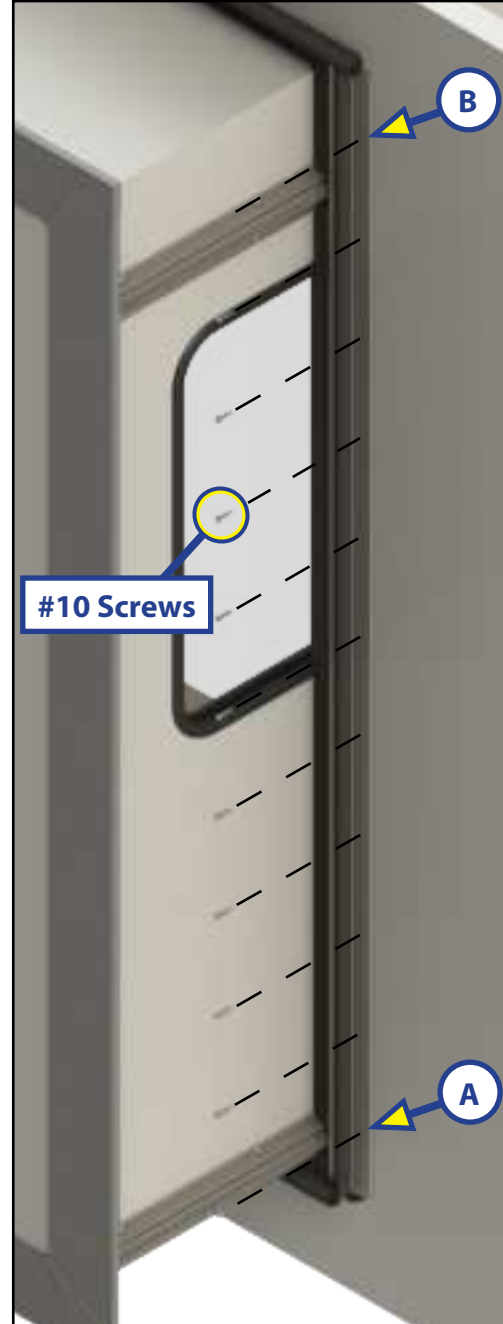
2. Install one #10 screw in the closest hole to the bottom gear rack (below the gear rack) (Fig. 16A).
3. Install one #10 screw in the first hole above the top gear rack (Fig. 16B).

Fig. 15



**NOTE:** Slide room and gear rack are hidden for clarity.

Fig. 16

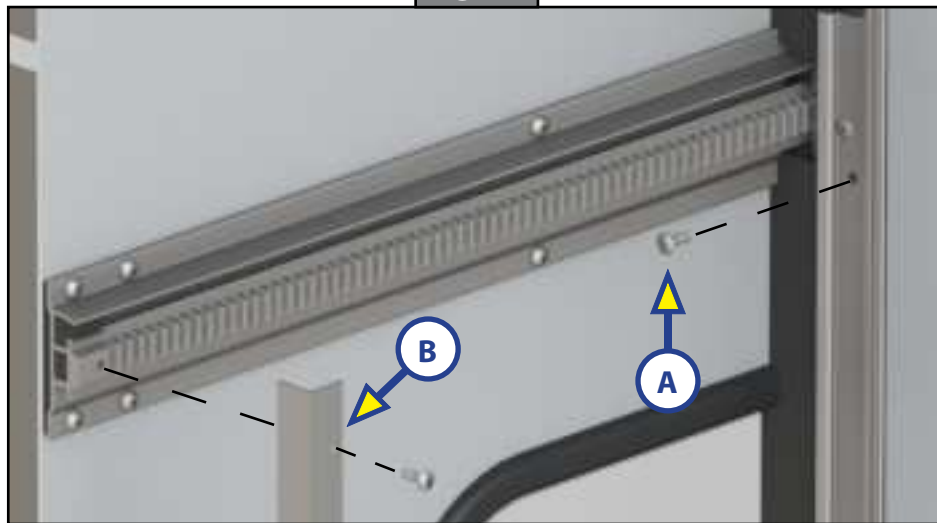


4. Finish attaching the "H" column to the wall of unit with #10 screws in the remaining holes in any order.
5. Repeat steps 2-4 on the opposite side of the slide box.
6. Remove the bearing block retention screws (Fig. 18A) from the upper and lower bearing blocks on each side.
7. Install column clamps on each side. See "Installation of Lippert Column Clamp" on page 15.
8. Remove the interior shipping angles (Fig. 18B) from the gear racks.
9. Attach the interior slide room fascia. Fastener spacing must be 6" to 8" apart unless using side-mounted stop angles.

**⚠ WARNING**

**Do not attempt to operate the slide room until both the exterior T-molding and the interior fascia are attached to the slide room.**

**Fig. 18**



10. Per seal supplier specification, apply glue to the back of the upper wipe seal and lay it over the top of the vertical wipe seal on the column.

## Required: Installation of Lippert Column Clamp

Lippert column interior clamps **MUST** be utilized for installed SureSlide® systems.

### Installation

1. Place the column clamp (Fig. 19A) on the interior of the slide system (Fig. 19B). The clamp should be resting on the bottom corner cup and overhanging the wall (Fig. 19 Detail).

**NOTE:** Use self-drilling screws or drill pilot holes.

2. Use #10 x 3/4" screws to attach the In-Wall column clamp to the interior of the In-Wall system.
3. Use #10 screws to fasten the In-Wall column clamp to the wall of the unit.
4. Repeat steps 1 - 3 for the opposite side.

Fig. 19

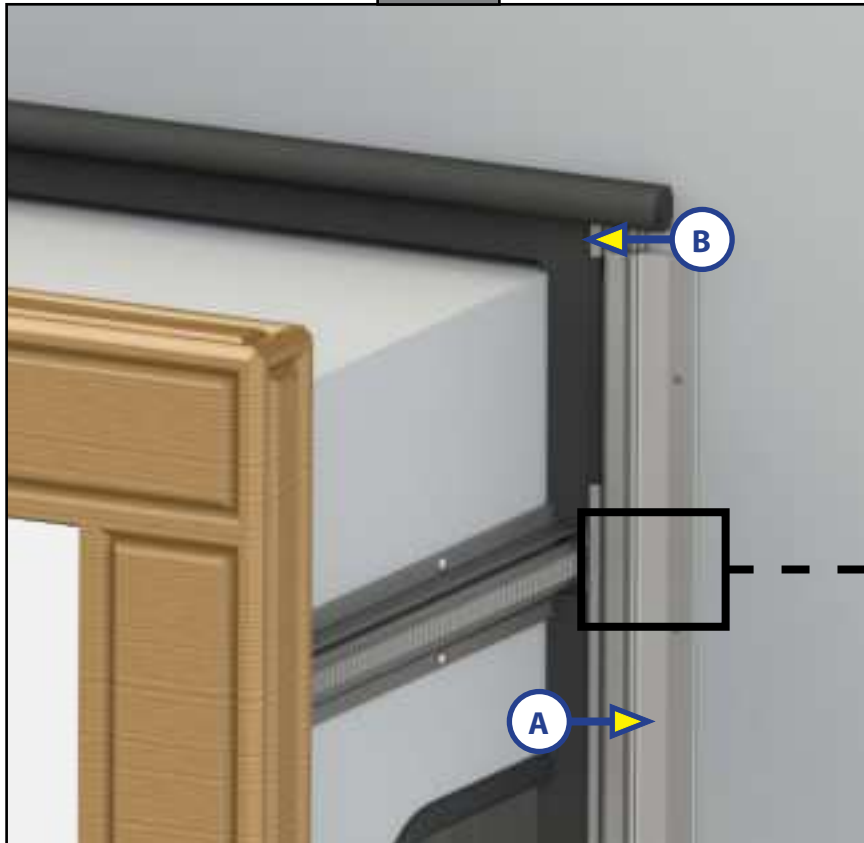
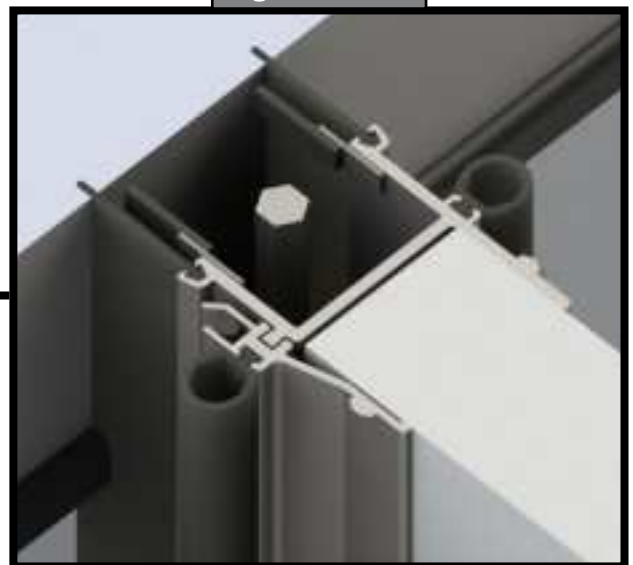


Fig. 19 Detail



## Controller Installation

1. Mount controller by securing to a solid surface with #8 x 1" wood screws or equivalent.

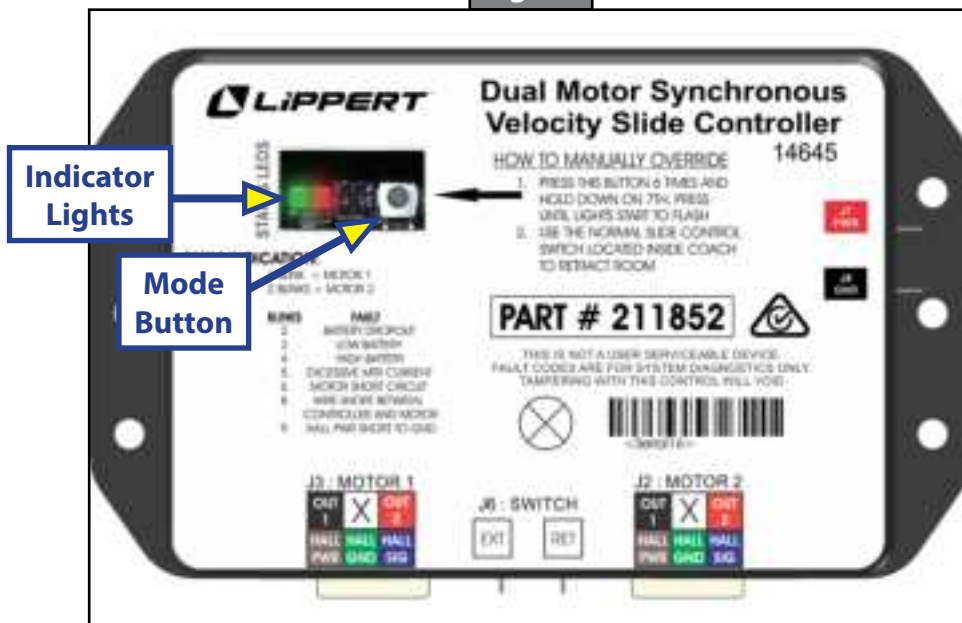
**NOTE:** The compartment where the controller is installed must be protected from the elements because the controller is not waterproof. Additionally, the controller should be located away from interior water sources that may cause damage.

**NOTE:** Controllers may **NOT** be mounted in an LP tank storage area.

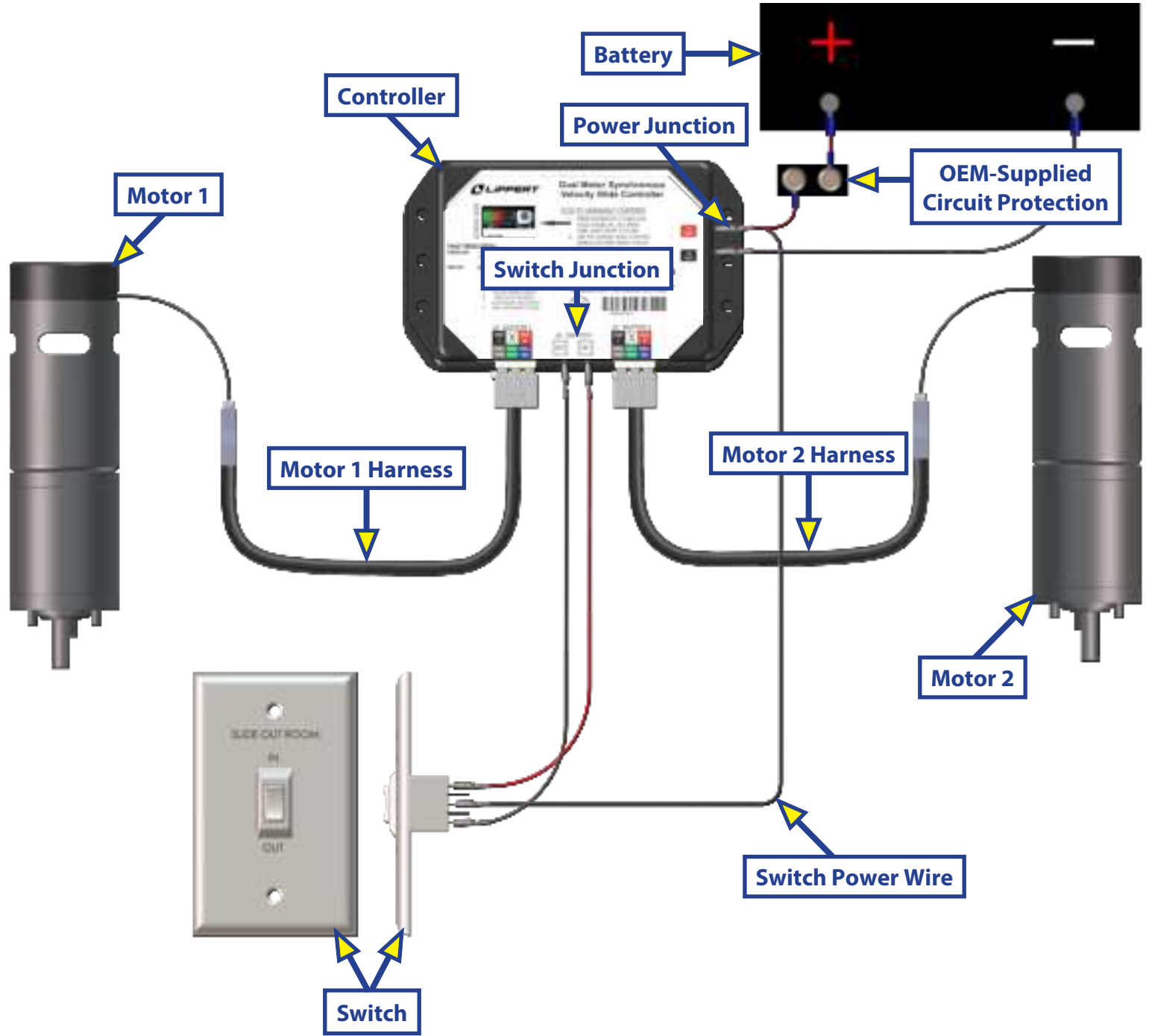
**NOTE:** The controller (Fig. 20) must be mounted with the face visible, allowing the indicator lights and mode button to be accessible for resetting and troubleshooting purposes. The controller must be accessible both when the room is extended and when it is retracted.

**NOTE:** OEM-supplied wire and circuit protection to be 10 AWG wire, not more than 30' in length, with 30 amp circuit protection installed in-line between the power supply and controller. All wiring to conform to RVIA standards.

Fig. 20



Wiring Diagram



**Wiring Color Code Information**

Label	Color	Description
A	Purple	Not Used
B	Blue	Hall Effect Communications
C	Green	Hall Effect Ground
D	Brown	Hall Effect Power
E	Red	Power/Ground
F	Black	Power/Ground

## Startup and Final Inspection

1. Inspect both the interior fascia and the exterior T-molding and verify they are securely fastened.
2. Inspect the connections at the controller and verify they are securely attached.
3. Visually inspect all of the gear rack mounting screws to verify they are tight and flush against the gear racks.
4. To synchronize the slide motors:
  - A. Using the wall switch, press the "IN" button.
  - B. Verify that both motors are moving the room in the same direction. If not, stop and check the wiring and connections to verify proper operation. Replace any damaged harness or motor if the wiring is damaged.
  - C. Allow the room to power all of the way in and continue pressing the "IN" button until both sides have completely stopped and the motors turn off by themselves.
  - D. Extend the room 1".
  - E. Retract the room until the motors stop.
  - F. Repeat steps D and E. In many cases two or three repetitions are necessary to synchronize the system. When the motors are synchronized they will stop at the same time.
5. Using the wall switch, extend the room all of the way out until it stops. Conduct these inspections:
  - G. Verify the room did a full stroke and that the interior seals are evenly compressed.
  - H. Verify the vertical wipe seals are in uniform contact with the side walls of the slide room.
  - I. Verify the upper and lower wipe seals are in uniform contact with the floor and ceiling.
  - J. Verify that all of the floor rollers are in constant contact with the slide box floor.
  - K. Verify the lower wipe seal is of proper length and is clear of all of the rollers.
  - L. Verify the exterior top wipe seal is overlapped and glued at each corner to the vertical wipe seal.

## Notes

[illegible]



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