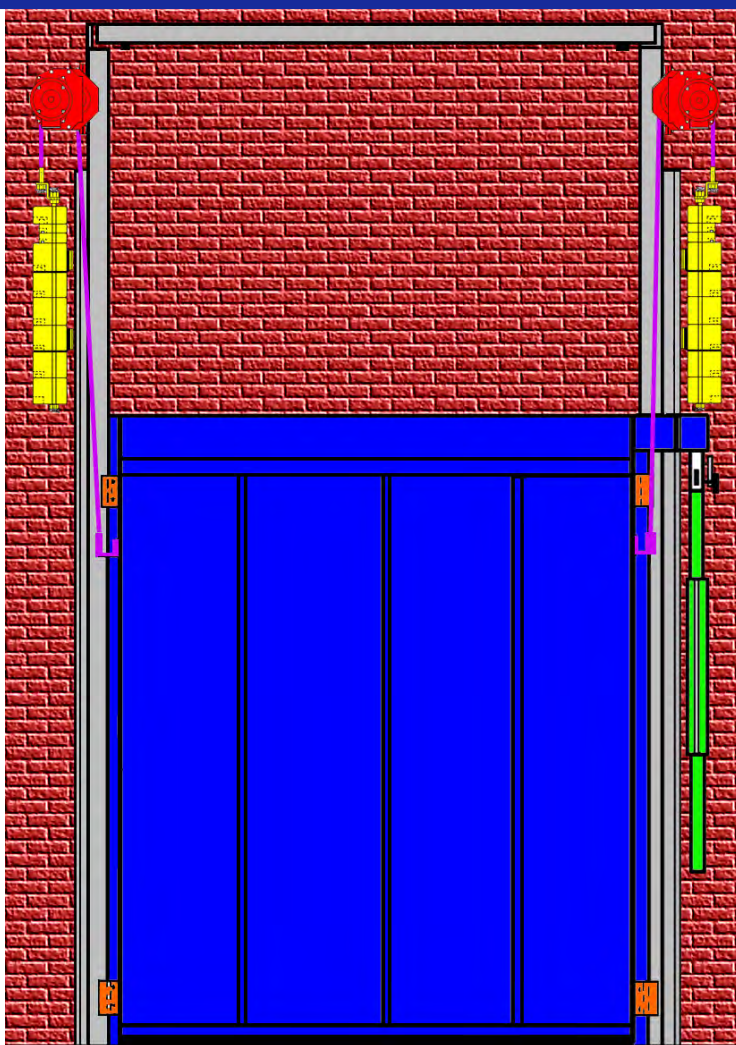




*Opening Quality Doors  
Around The World*



## Installation Instructions

Single Section Slide-Up Doors  
(Power and Manual)

[www.couriondoors.com](http://www.couriondoors.com)

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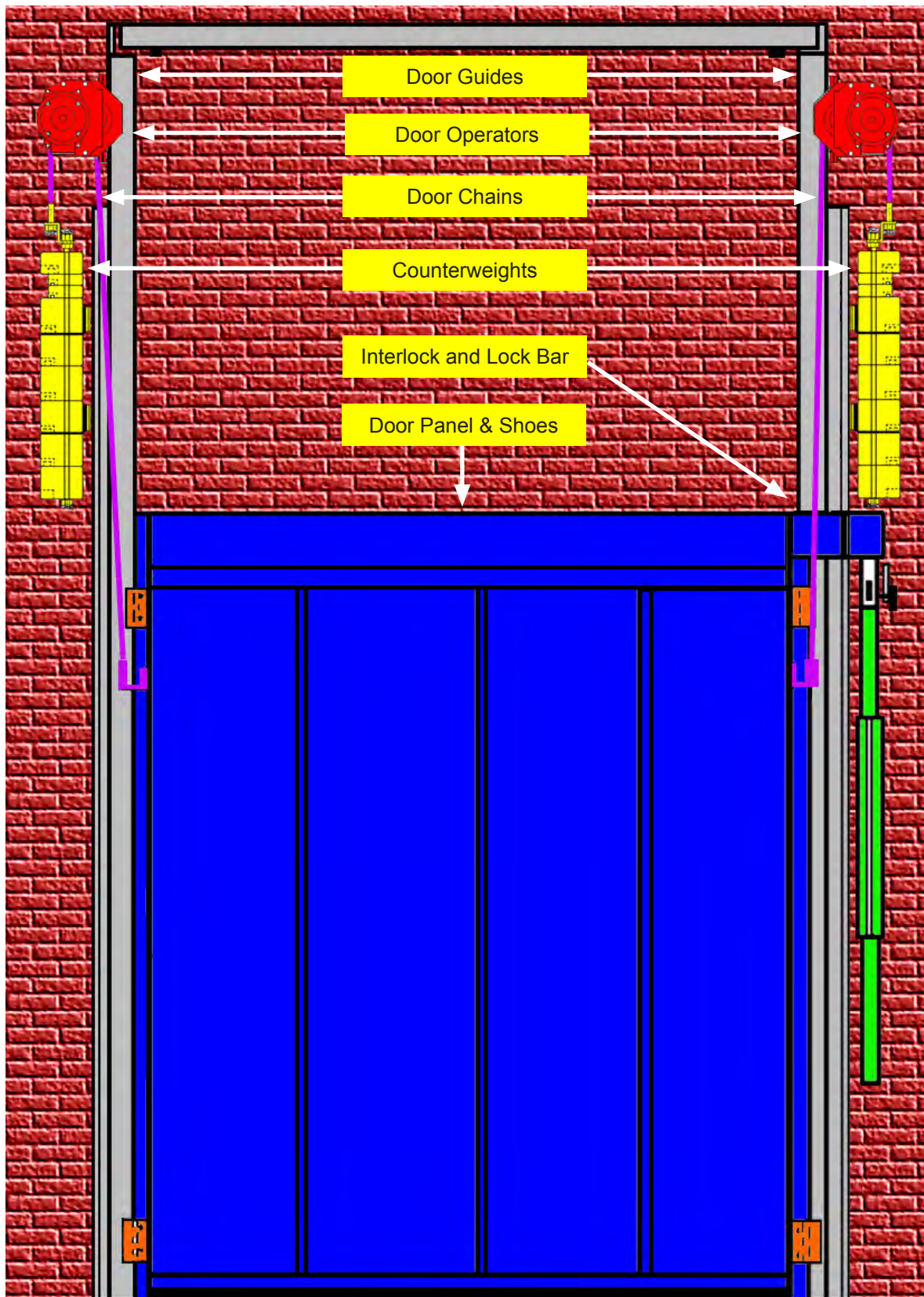
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## Additional Documentation Provided By Courion (when applicable)

General Layout Drawings	Material Packing List
Car Enclosure Installation Instructions	Retiring Cam Installation Instructions
Car Gate Installation Instructions	Door Control Installation & Adjustment Manual
Wiring Diagrams	Parts & Maintenance Manual
Other:	Other:
Other:	Other:

**For Immediate Help Call 1-314-533-5700**

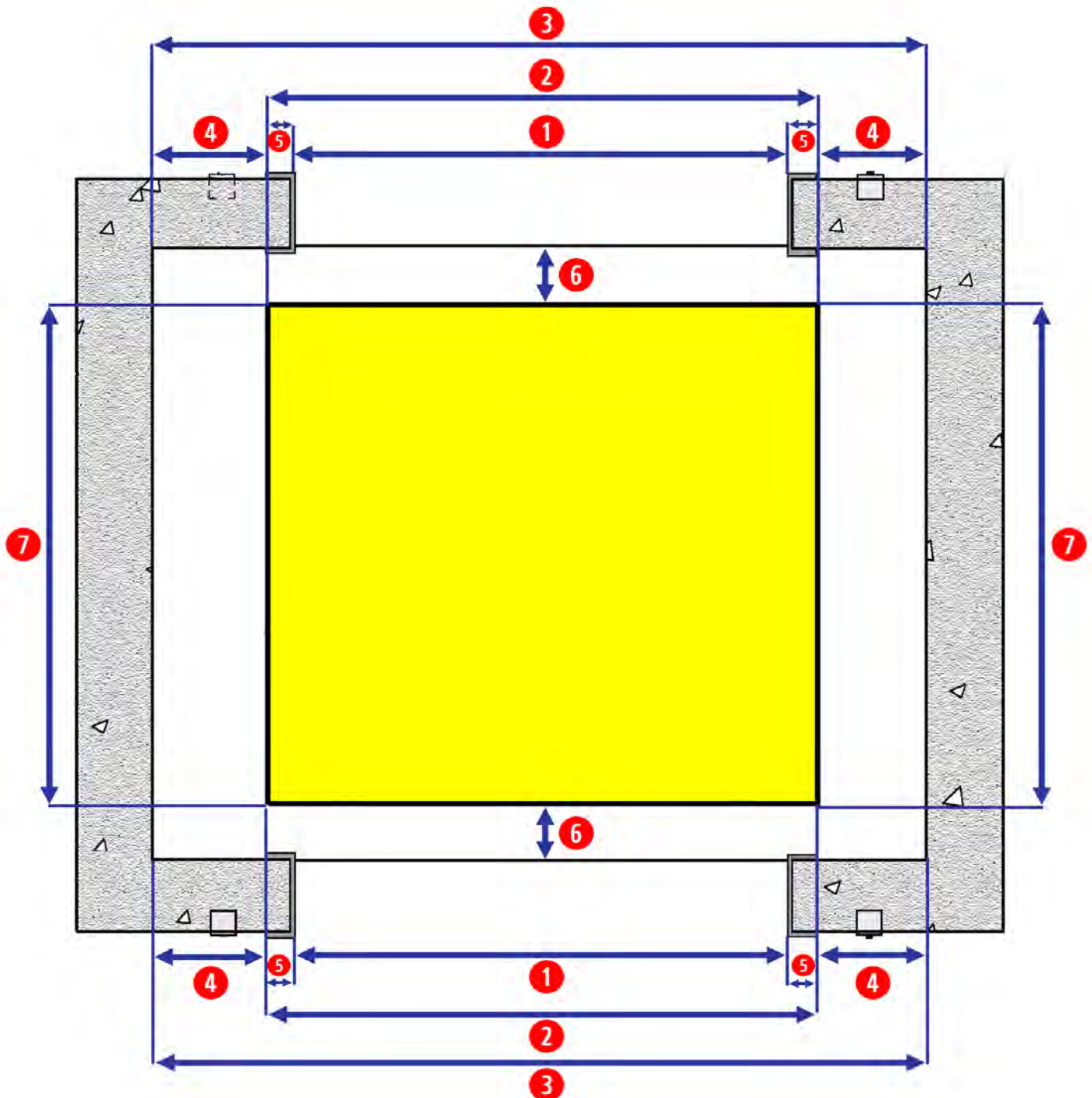
**Single Section Slide-Up Door System Layout - Power Operation Shown**





## Hoistway Survey

Using COURION's **General Design Drawings (GD Drawings)** enclosed with these Instructions, verify all dimensions to ensure that your COURION equipment will properly fit in your hoistway.

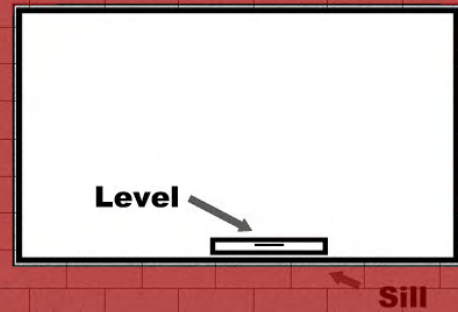


1 Opening Width 2 Platform Width 3 Clear Hoistway 4 Return 5 Lap 6 Car-to-Sill 7 Platform Depth

**For Immediate Help Call 1-314-533-5700**

- 1 Pit Depth    2 Floor-to-Floor
- 3 Clear Overhead    4 Opening Height
- 5 Wall Thickness    6 Car-to-Sill
- 7 Inside Cab

Sills must be level to a tolerance of 1/8" (3mm) for every 8'-0" (2,440mm)

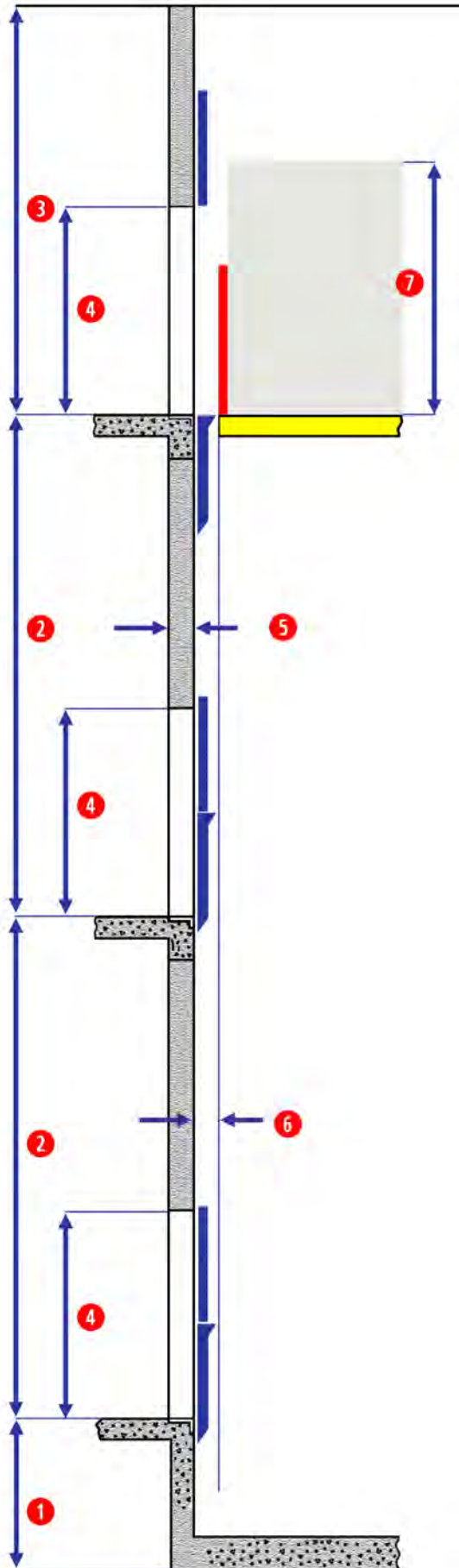


If you are installing Slide-Up Doors, verify the Floor-to-Floor Height and the Car-to-Sill as follows.

The Floor-to-Floor Height should be measured from the **UNDERSIDE** of the Extended Sill.

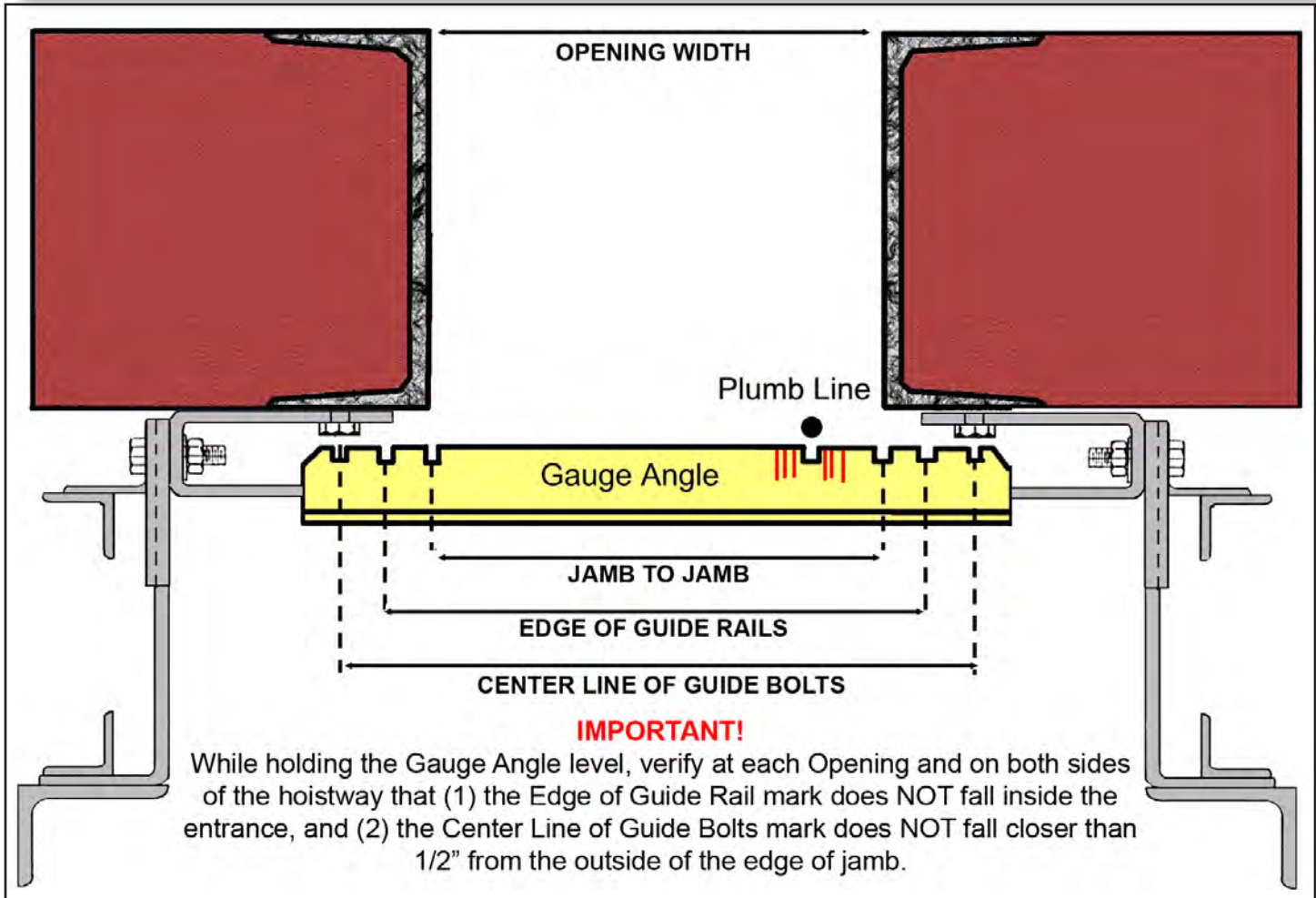
Verify the Sill Extensions (X) and the Car-to-Sill (Y) are the same as shown on Courion's General Layout Drawings.

Platform



## Guide Rail Installation

Using the Gauge Angle provided by Courion and a plumb line, attach the Door Guides to the Entrance Frames and hoistway wall. If you have Drywall Entrance Frames, the Drywall Frame Covers must be installed **BEFORE** your Guide Rails are attached to the frames.



### CRITICAL!

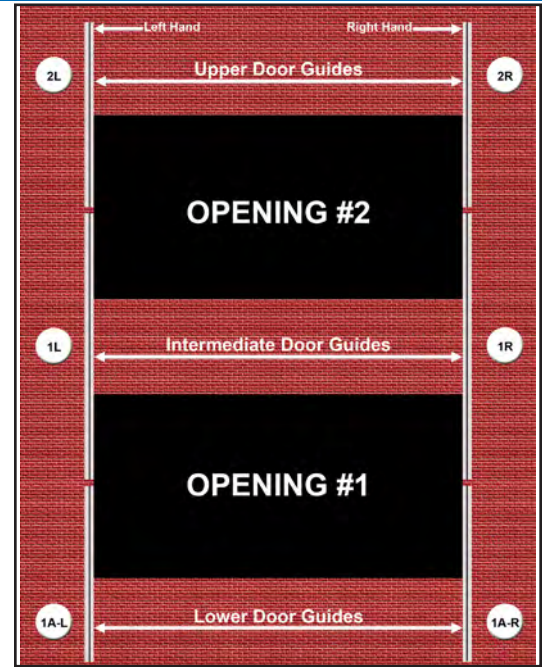
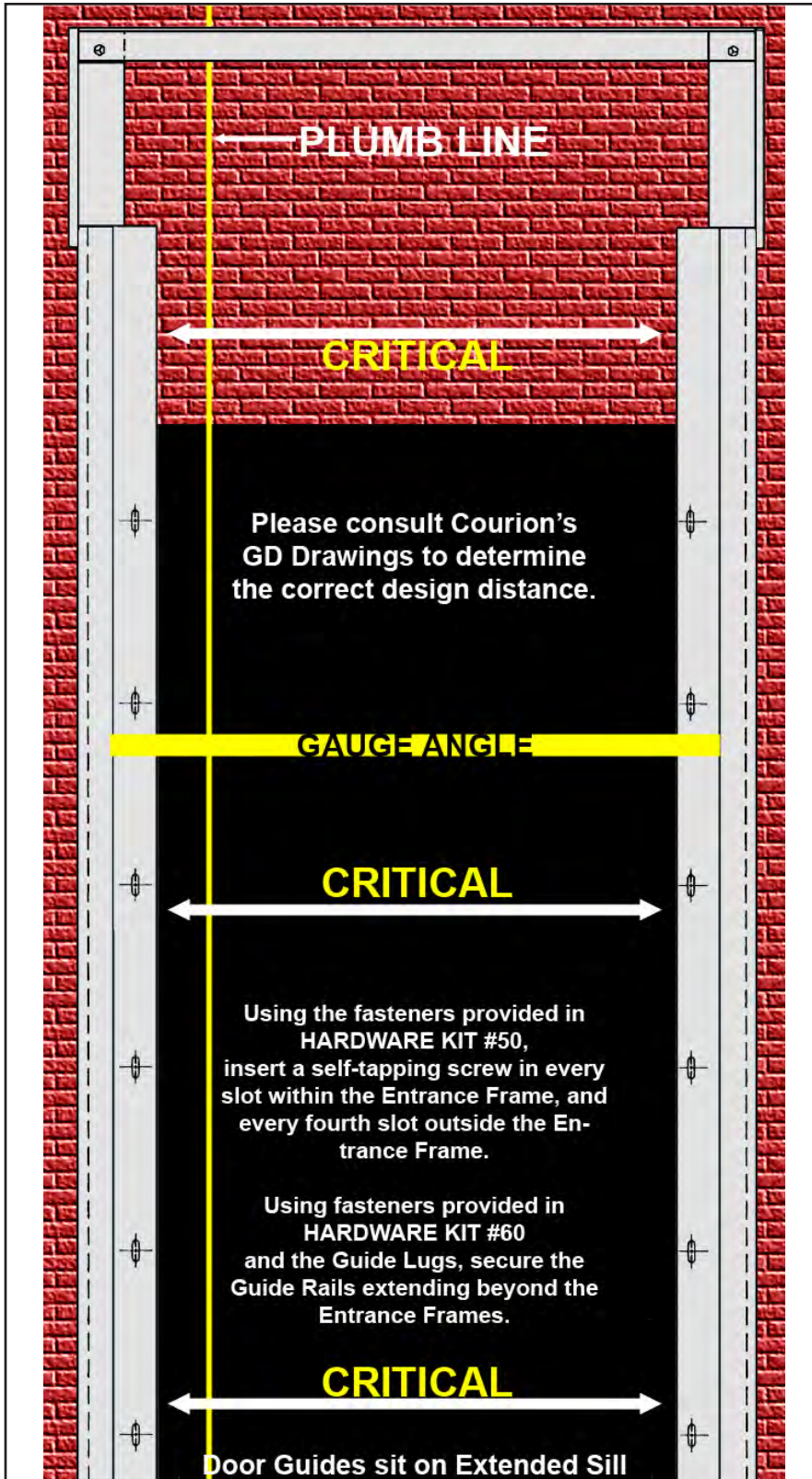
Because the Hoistway Door Guide Rails are set in-line, one above the other, the Entrance Frames **MUST BE** vertically aligned and plumb with one another. Using the Guide Rail Gauge Angle provided by Courion and a Plumb Line, verify that the Entrance Frames are in-line and plumb. If they are not, STOP and call Courion.

- At the TOP, MIDDLE, and BOTTOM of each Opening, make a temporary mark on the Gauge Angle at the Plumb Line. Upon completion, make a permanent mark on the Gauge Angle at the halfway point between the two outside temporary plumb line marks.
- At each Opening, align the permanent plumb line mark on the Gauge Angle with the plumb line. Using the Gauge Angle as a guide, clamp the Guide Rails into position.
- Attach Guides using fasteners provided by Courion.



**For Immediate Help Call 1-314-533-5700**

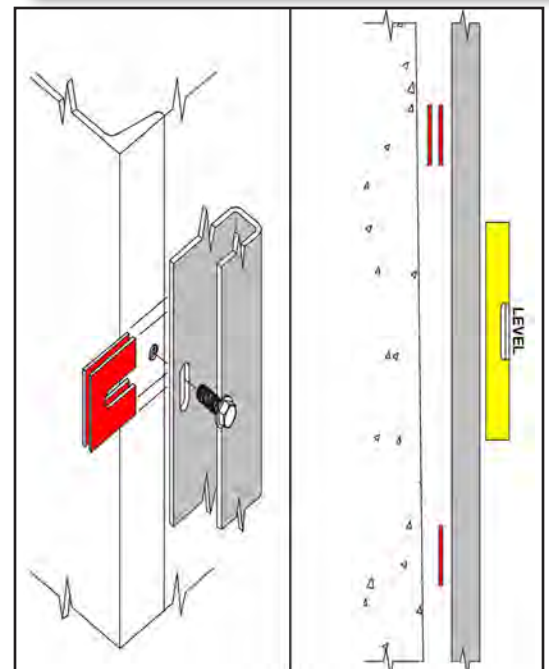
**Guide Rail Identification and Setup:** Courion Door Guide Rails are manufactured and shipped in pairs (left and right hand) for specific landings. For proper identification of the Guide Rails, refer to Courion's GD Drawings and note the corresponding numbers on the side of the angles of the Guide Rails. Be sure to install the correct Guide Rails at the proper opening.



### **IMPORTANT!**

Using the Plumb Line and Level, verify that the Guide Rails are plumb and true with each other (both side-to-side and up-and-down).

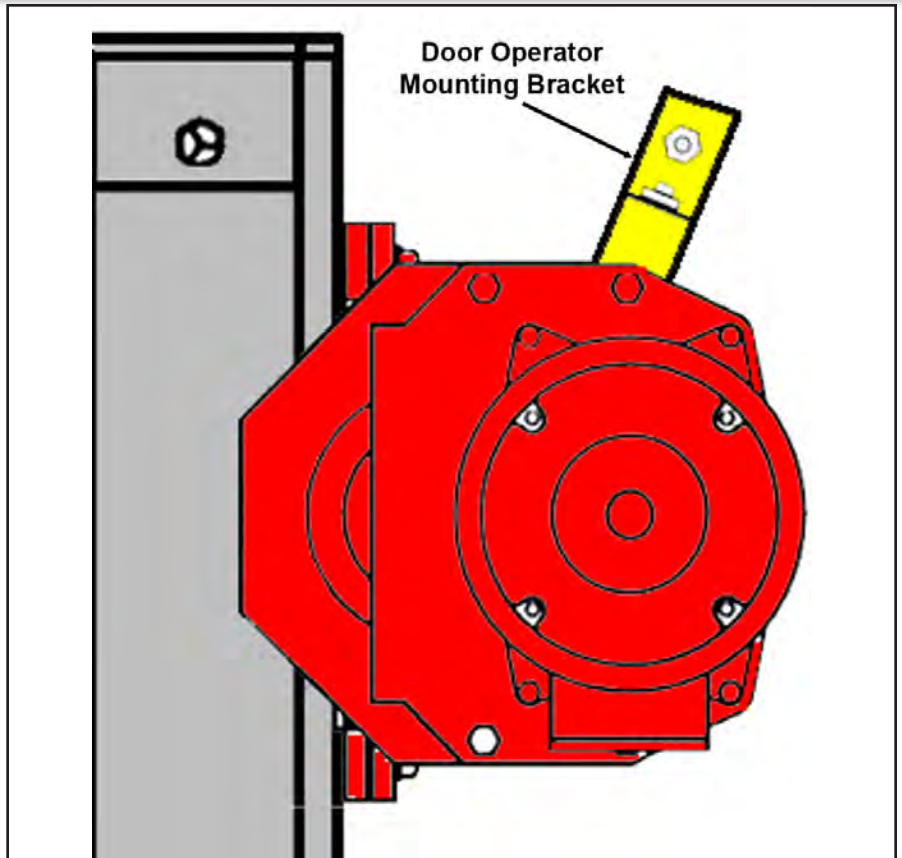
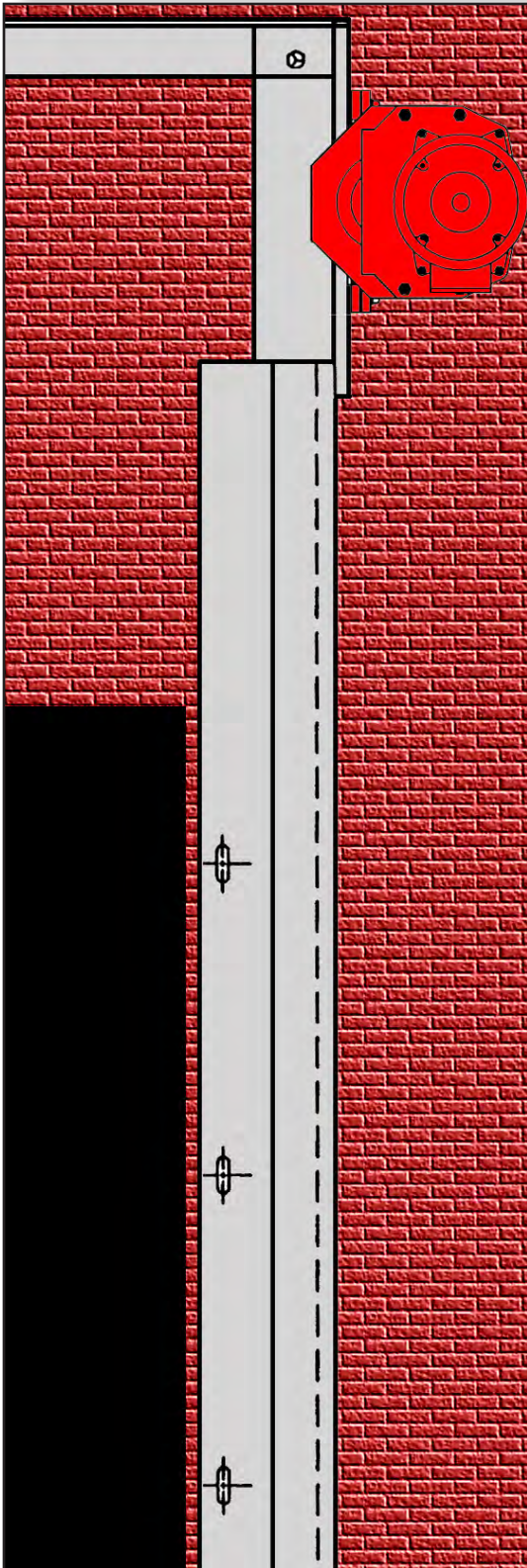
Excessive shimming of the Door Guides may void the entrance fire rating and may cause your installation to fail inspection.





## Door Operator Installation

Using the fasteners provided in **HARDWARE KIT #30**, mount a Door Operator (power operation) or Sheave (manual operation) to the Door Operator Mounting Tabs on each side of the Opening.

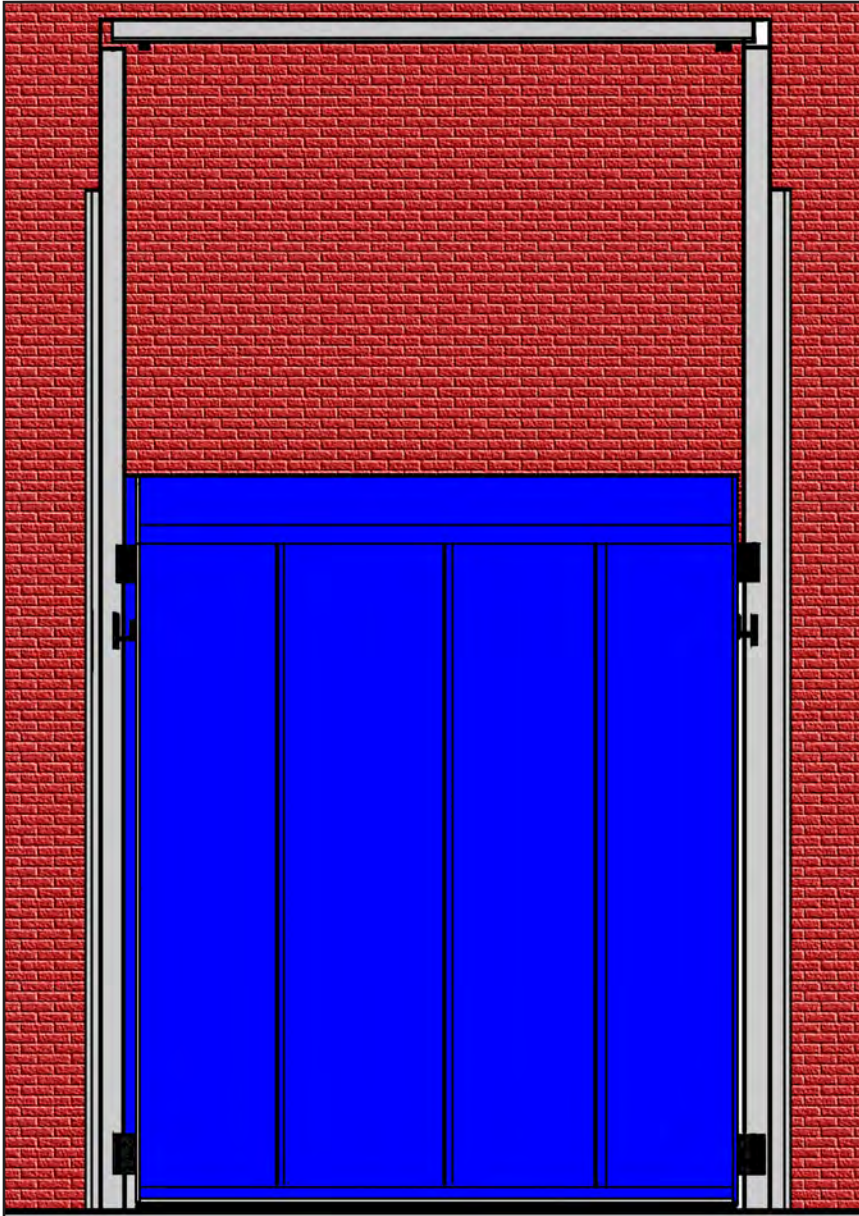


Attach the OPERATOR MOUNTING BRACKET found in Hardware Kit #30 to the outside corner of the Door Operator using one of the four bolts holding the operator casting together. Attach the other end of the Operator Mounting Bracket to the front hoistway wall using the sleeve anchor.



## Door Panel Installation

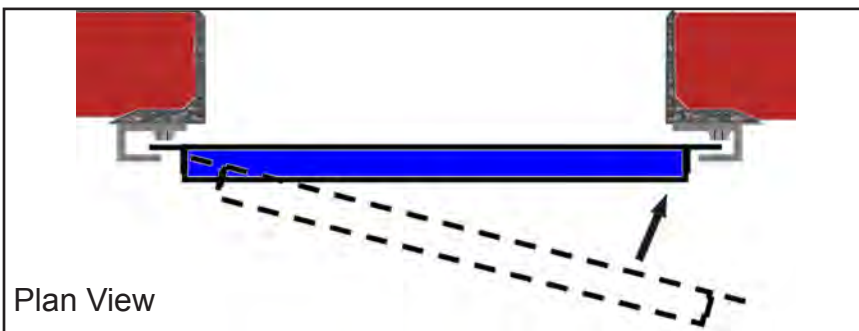
Set the Door Panel(s) in position by inserting the shoe angle of the Door Panel into the Door Guide Rail on one side and then swinging the opposite side into position. Be sure to install each Door Panel at its proper Landing.

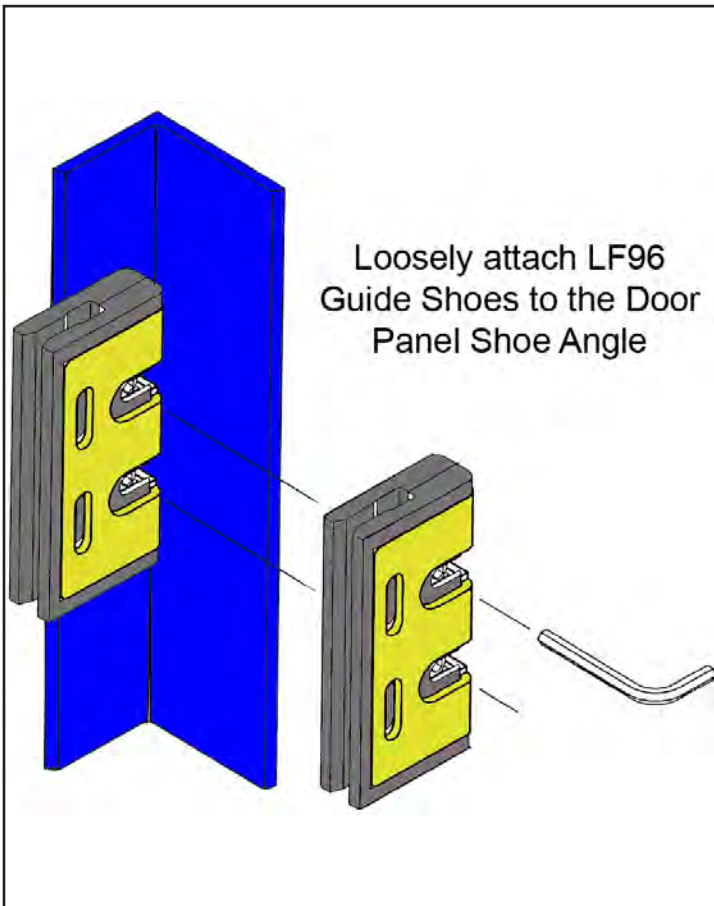


- Courion checks each Door Panel for flatness prior to shipment. However, shipping and job site handling may produce some twist or bow in the Door Panel. Check each Door Panel for flatness by pushing the Door Panel against the guide bolts. If both shoe angles are flat against the guide bolts, twist is not present. If one side is not flat against the guide bolts, the Door Panel has some twist in it that must be removed before continuing with the installation.

### IMPORTANT!

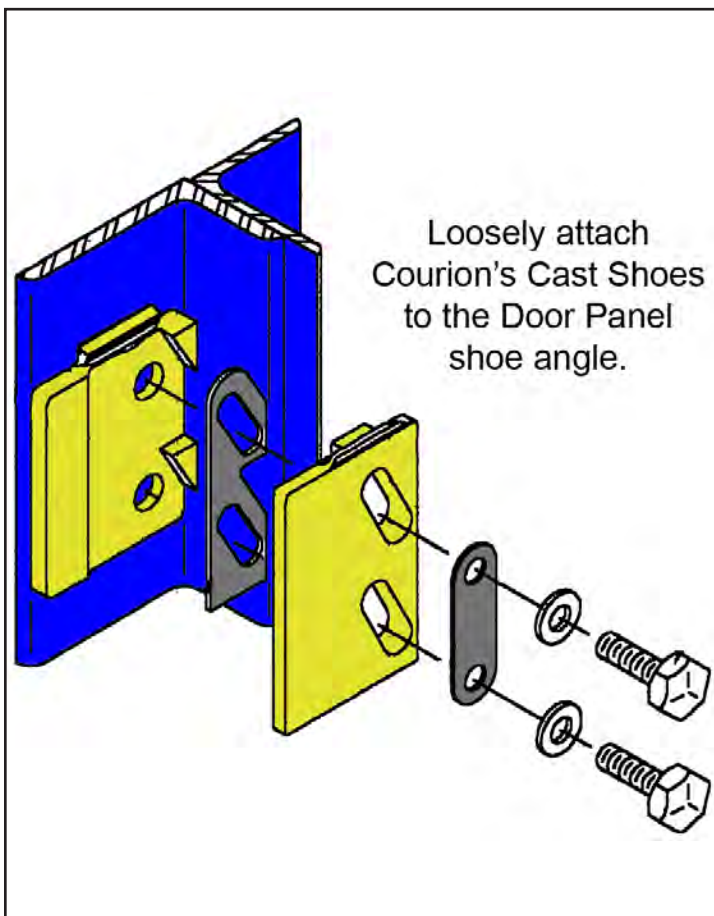
Be sure the hoist, hoist support, hoist chains, slings, straps, and any other accessories used to hoist the Door Panels into position are capable of safely supporting the Door Panels. Carefully inspect each component of the hoisting system for damage or wear before use.





**NOTE**

Loosely attach the Guide Shoes to the Door Panels. DO NOT overtighten. The Guide Shoes will be adjusted and tightened after the Door Chains have been installed.





## Door Chain and Counter Weight Stack Installation

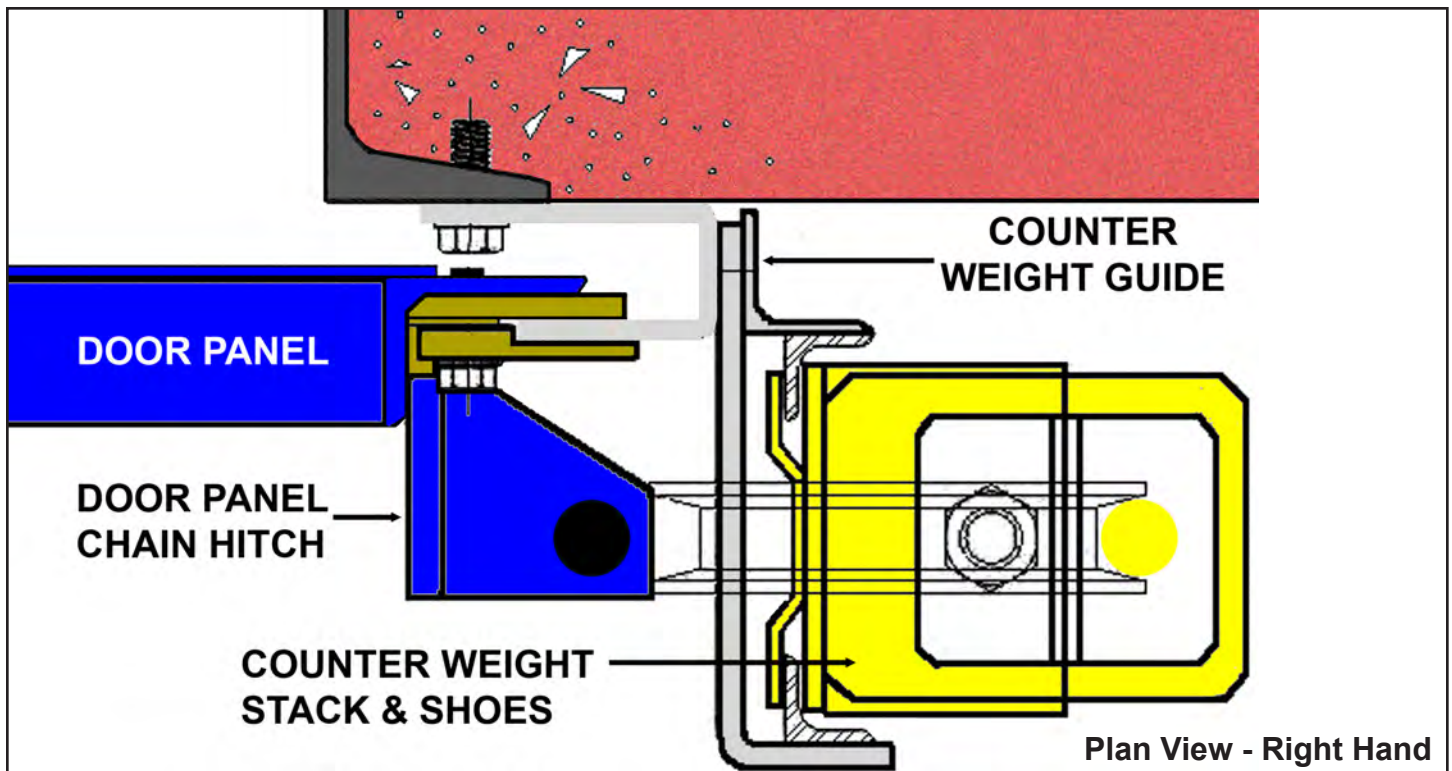
Using the Counterweight Props provided by Courion, assemble the Weight Stack in the Door FULL CLOSE position, and attach the Door Chain to the Door Panel Chain Hitch and Counterweight Shackle on both sides of the Opening. When complete, adjust and tighten the Door Shoes to limit side-to-side play to about 1/8" (4mm).

Using the Counterweight Props provided by Courion, assemble the Weight Stack in the Door FULL CLOSE position, and attach the Door Chain to the Door Panel Chain Hitch and Counterweight Shackle on both sides of the Opening. When complete, adjust and tighten the Door Shoes to limit side-to-side play to about 1/8" (4mm).



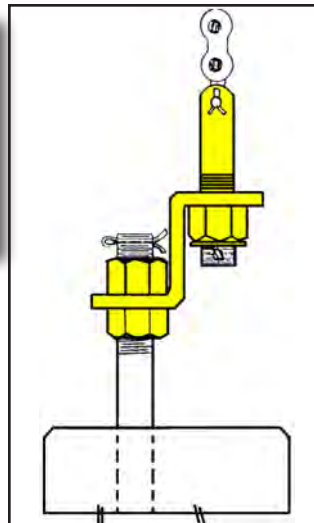
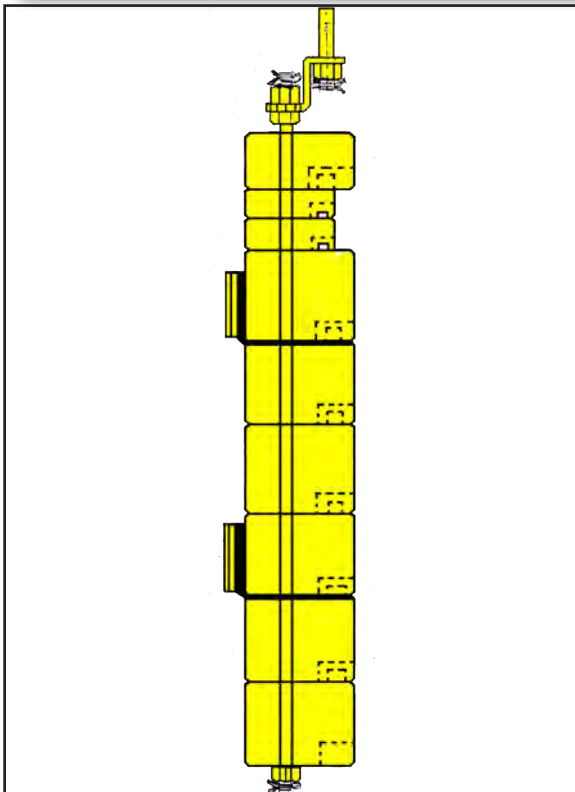


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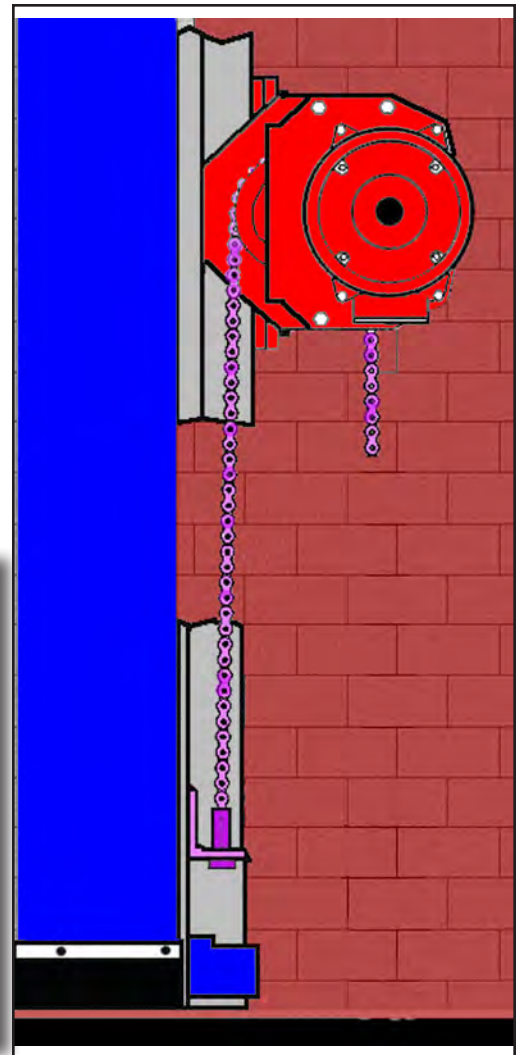
### IMPORTANT!

Fit the Weight Shoes onto the Weight Rod and the Counter Weight Guide during the stacking process.



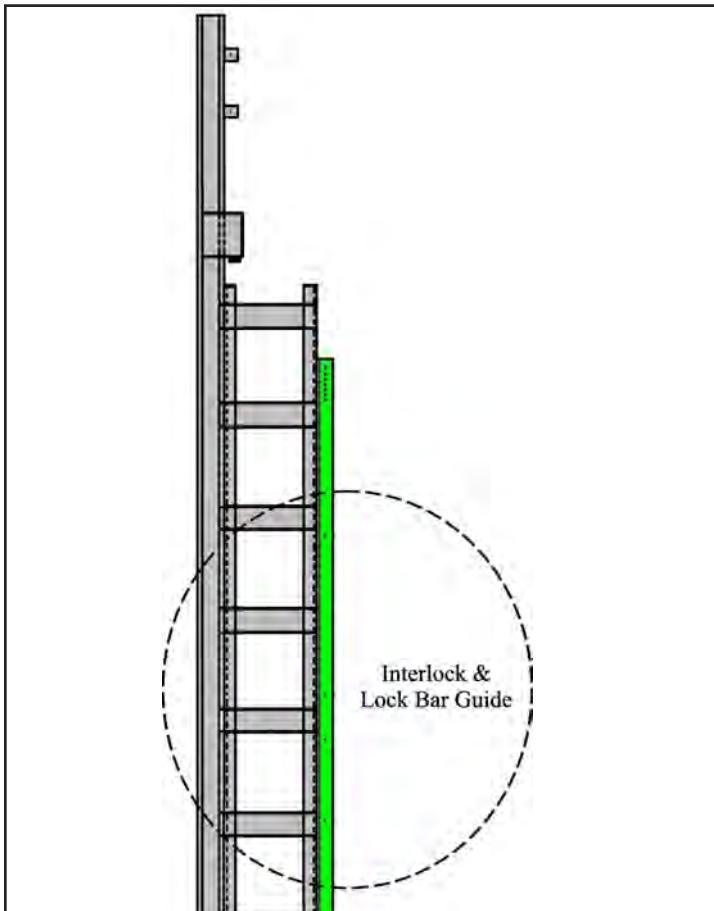
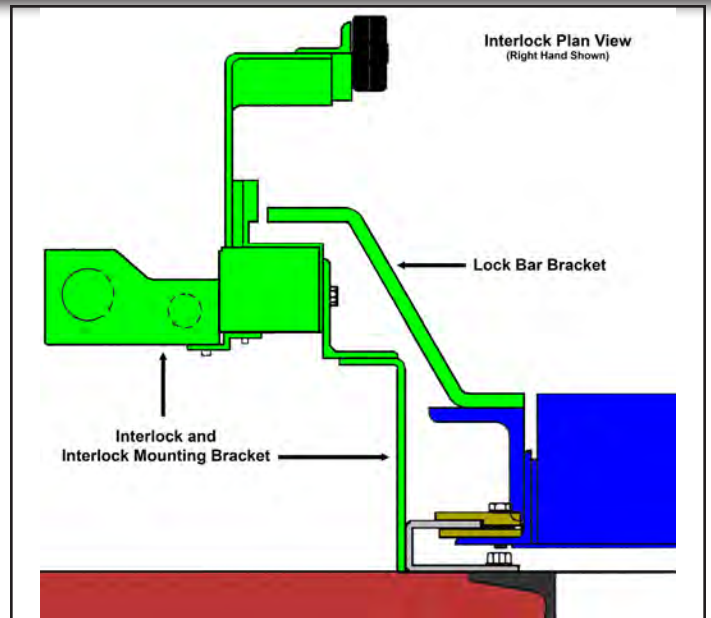
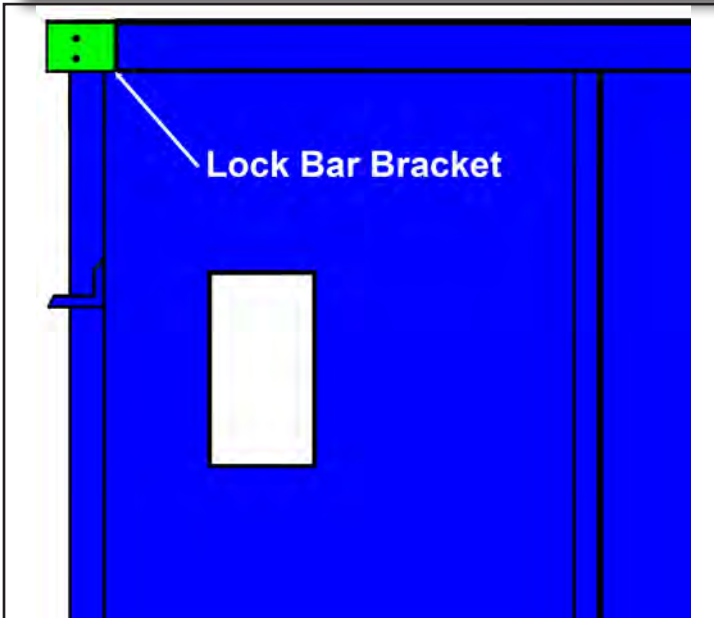
### ADJUSTMENT

Using the Hex Nuts on the Shackle, adjust the Counter Weight Stack to insure that the Door Panel reaches the FULL OPEN and FULL CLOSE position.



## Interlock and Lock Bar Installation - Power Jobs

Attach the Lock Bar Bracket to the Interlock side of the Door Panel. Mount the Interlock to the Interlock Mounting Bracket. Attach the Lock Bar Guides to the Interlock Mounting Bracket. Install the Lock Bar using the Lock Bar Bolt and adjust to proper height.

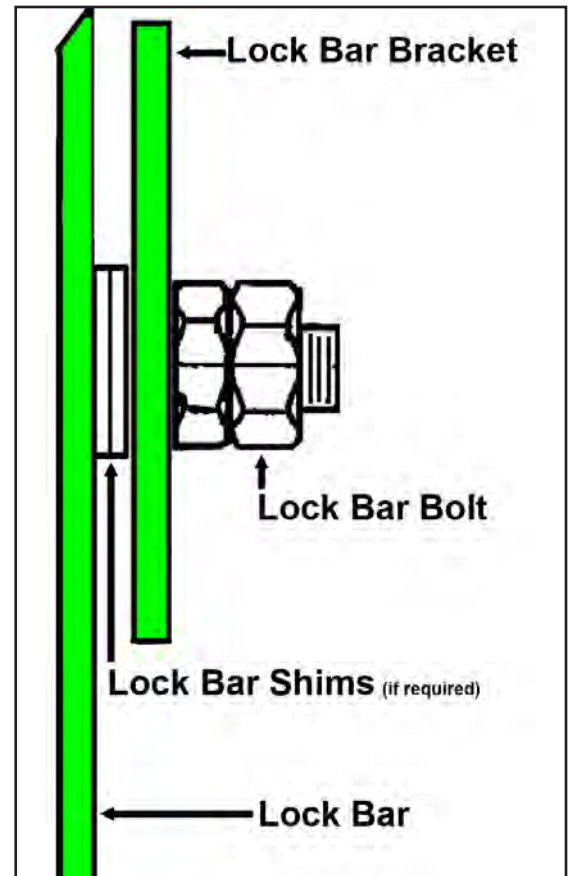
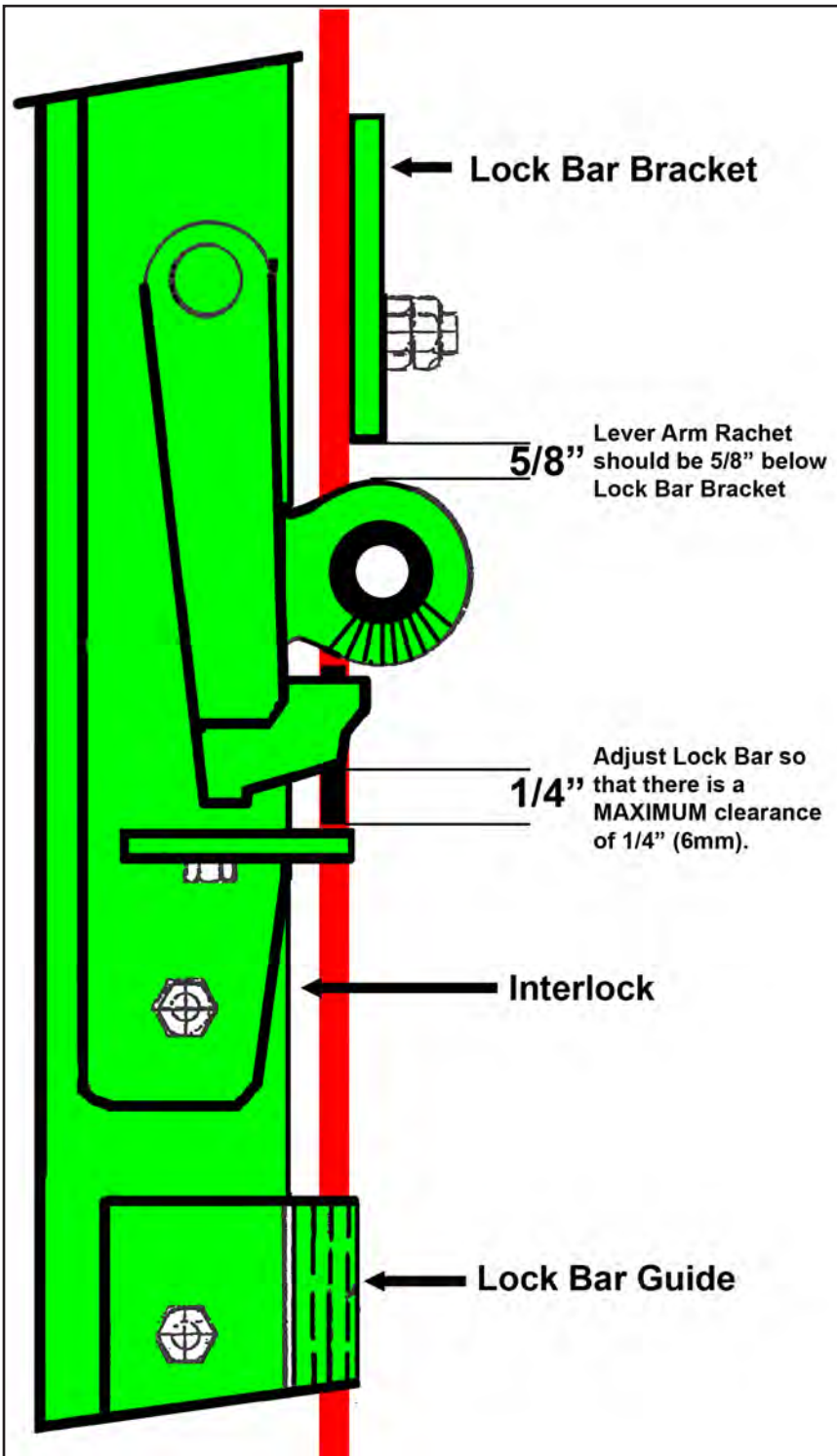


### IMPORTANT!

At Landings requiring an EMERGENCY UN-LOCKING DEVICE (Pull Chain Box) an EUD friendly style Interlock is used. Please consult Courion's General Layout Drawings to determine the correct side and style of Interlock to be used at each Opening.

### NOTE

With Slide-Up Doors, the Interlock is mounted in an inverted position.



#### NOTE

The chamfered end of the Lock Bar MUST face the Interlock.

#### IMPORTANT!

With the Door Panel in the FULL CLOSE position, adjust the Interlock vertically so that the Lever Arm Ratchet is approximately  $5/8"$  (16mm) BELOW the Lock Bar Bracket.

Move the Lock Bar so that there is a MAXIMUM clearance of  $1/4"$  (6mm) between the top of the Locking Dog and the top edge of the rectangular hole in the Lock Bar.



## Interlock Adjustment

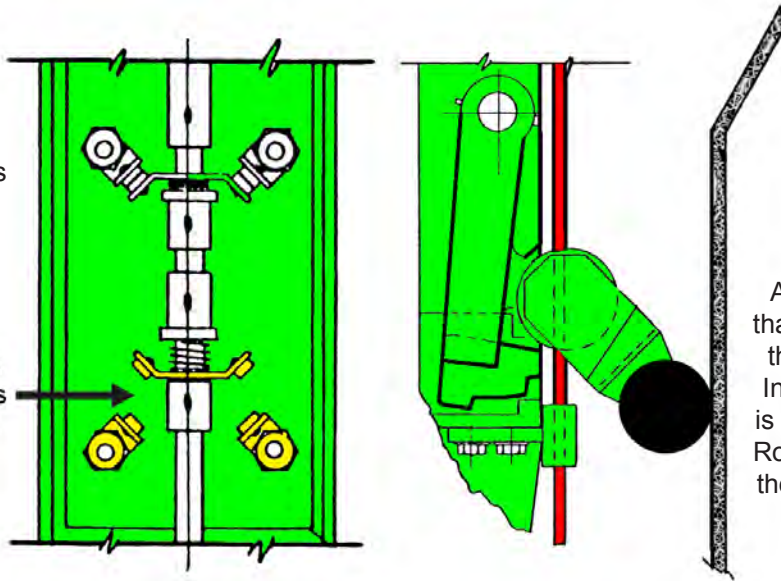
The correct adjustment of the Interlock Roller Arm is critical to the proper operation of your Courion Interlocks. Make these adjustments AFTER the Retiring Cam is in place on the Car.

### Adjustment for the Interlock Roller Arm and Interlock Contact When Doors are UNLOCKED

Elevator cannot run - Door Operator circuit ready for operating

The top Contacts are for zoning motors. The number of zone contacts varies depending on the type of Door Control you have.

Interlock  
Contact is  
OPEN

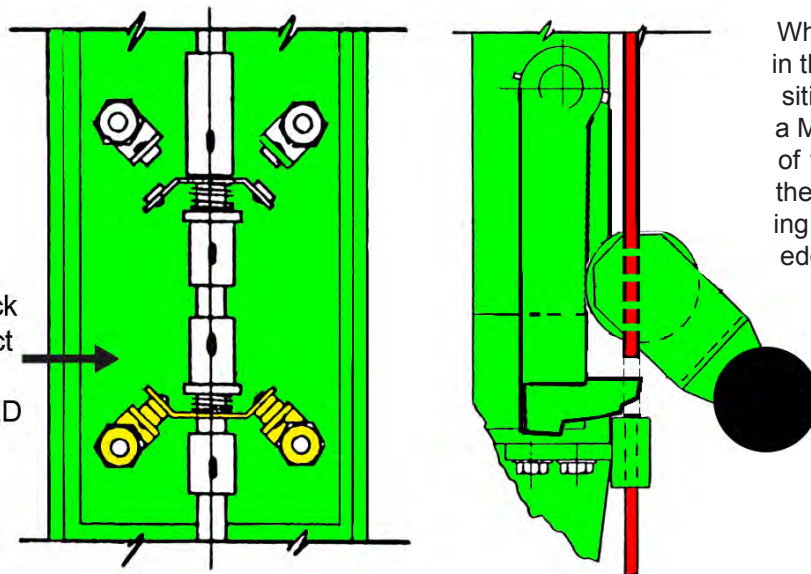


Adjust Roller Arm so that clearance between the Lock Bar and the Interlock Locking Dog is 1/8" to 1/4" when the Roller Arm is resting on the face of the Retiring Cam.

### Adjustment for the Interlock Roller Arm and Interlock Contact When Doors are LOCKED

Elevator can run - Door Operator cannot operate

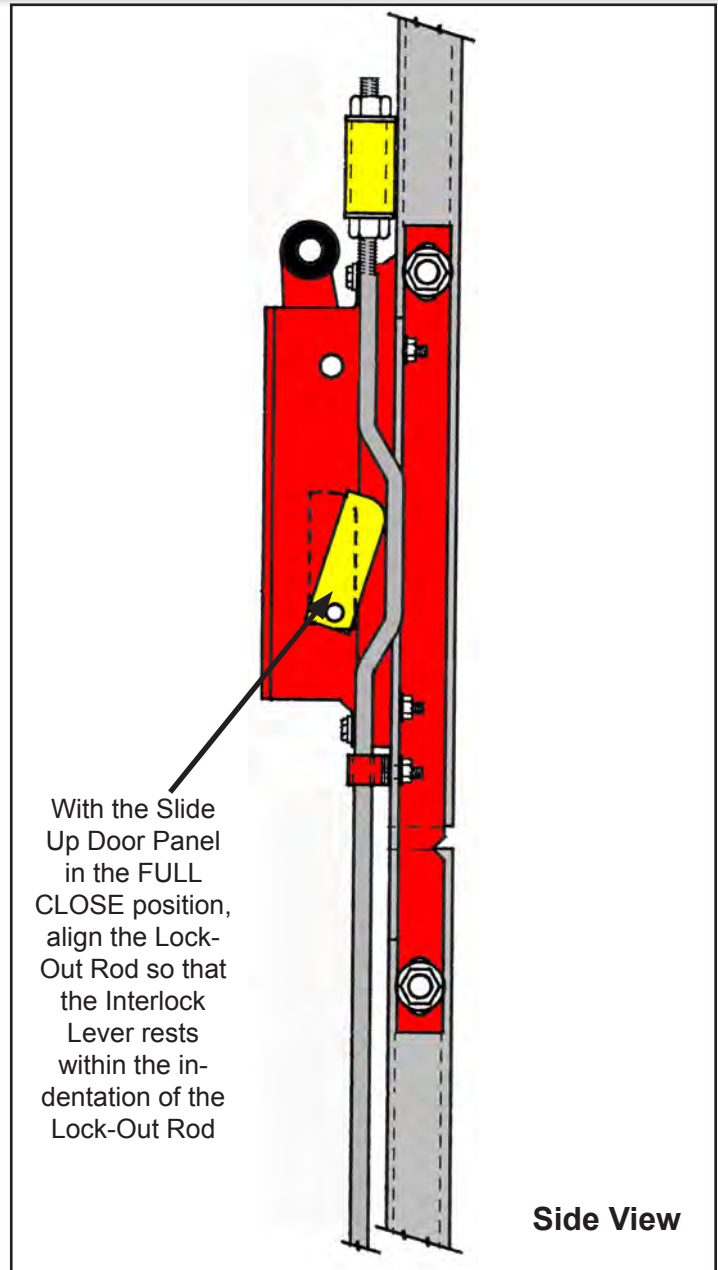
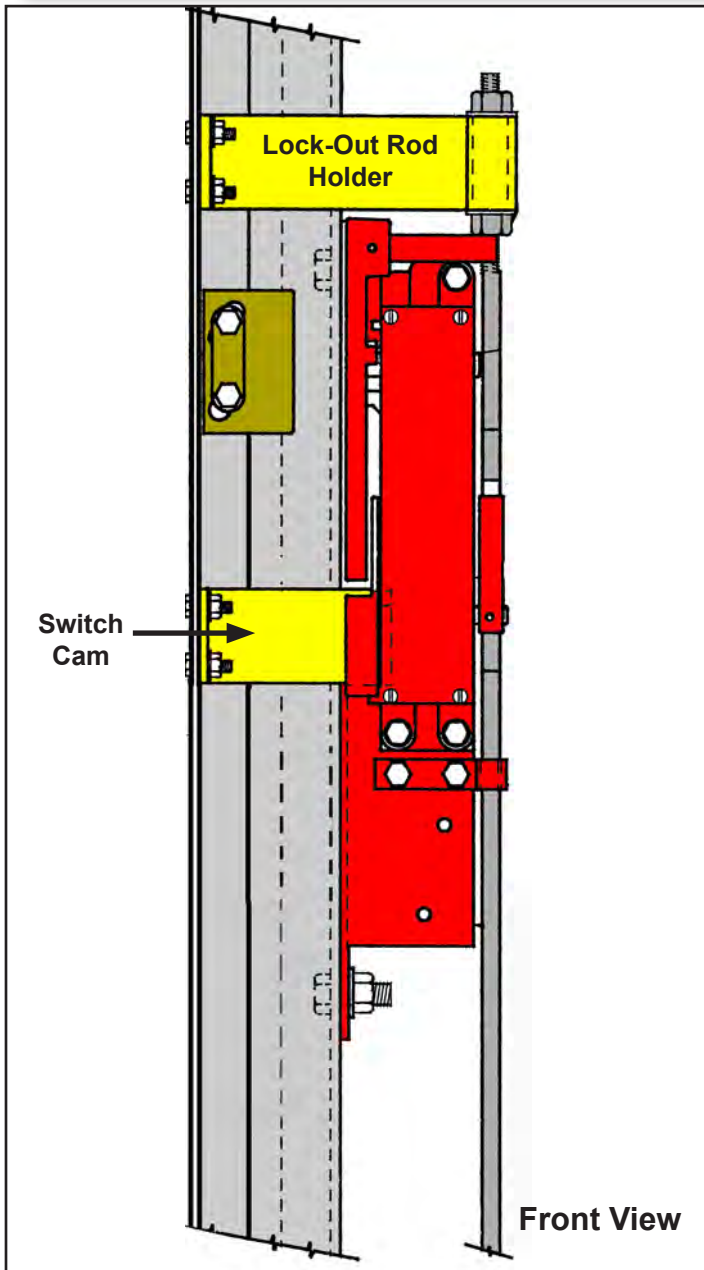
Interlock  
Contact  
is  
CLOSED



When Door Panels are in the FULL CLOSE position, there should be a MAXIMUM clearance of 1/4" (6mm) between the bottom of the Locking Dog and the bottom edge of the hole in the Lock Bar.

## HG Interlock Installation - Manual Operation

Mount the HG Interlock to the Interlock Mounting Bracket. Mount the Switch Cam and Lock-Out Rod Holder to the side angle of the Slide Up Door Panel. Slide the Lock-Out Rod down through the Lock-Out Guide and the Lock-Out Rod Holder and adjust to proper position.



### IMPORTANT!

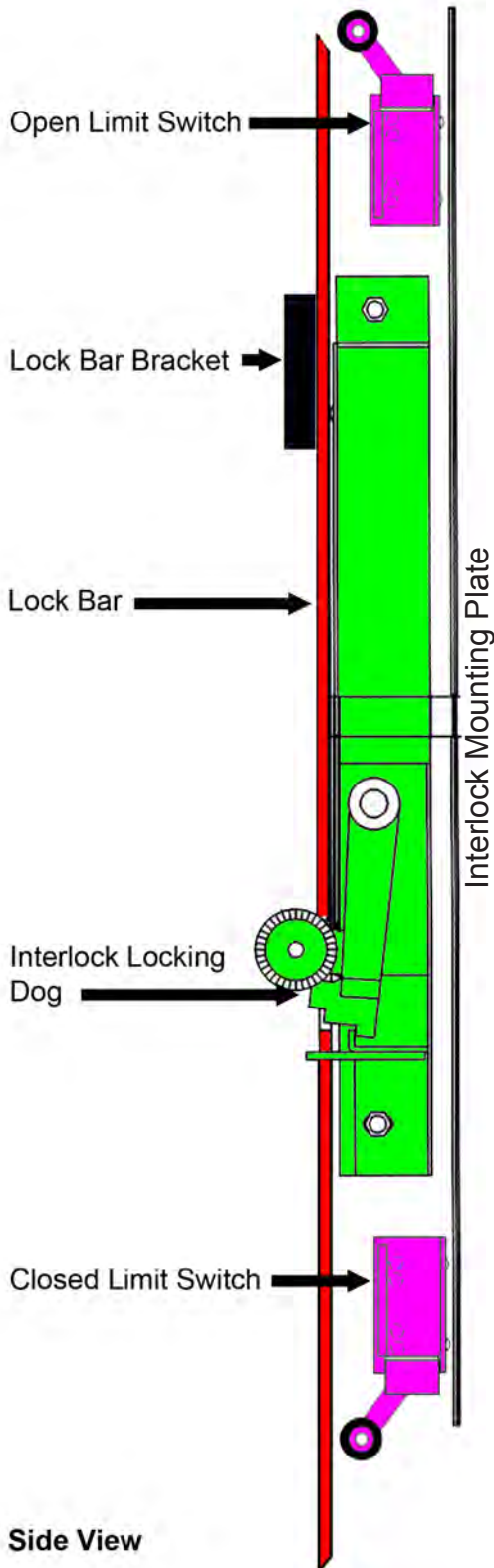
Make sure to align the Switch Cam so that it enters the Interlock without binding when the doors are in the FULL CLOSE position.

### IMPORTANT!

Using the set screw on the Interlock Lever, adjust the Interlock Lever so that the contacts within the Interlock make-up ONLY when the Door Panel is in the FULL CLOSE position.

## Door Limit Switch Installation - Power Operation

Mount the Door Open and Door Closed Limit Switches to the Interlock Mounting Plate.



### IMPORTANT!

Door Panels, Interlocks, and Lock Bars must be properly adjusted BEFORE installing the Door Limit Switches. Make sure your doors operate freely and reach FULL OPEN and FULL CLOSE during manual operation.

### ADJUSTMENT

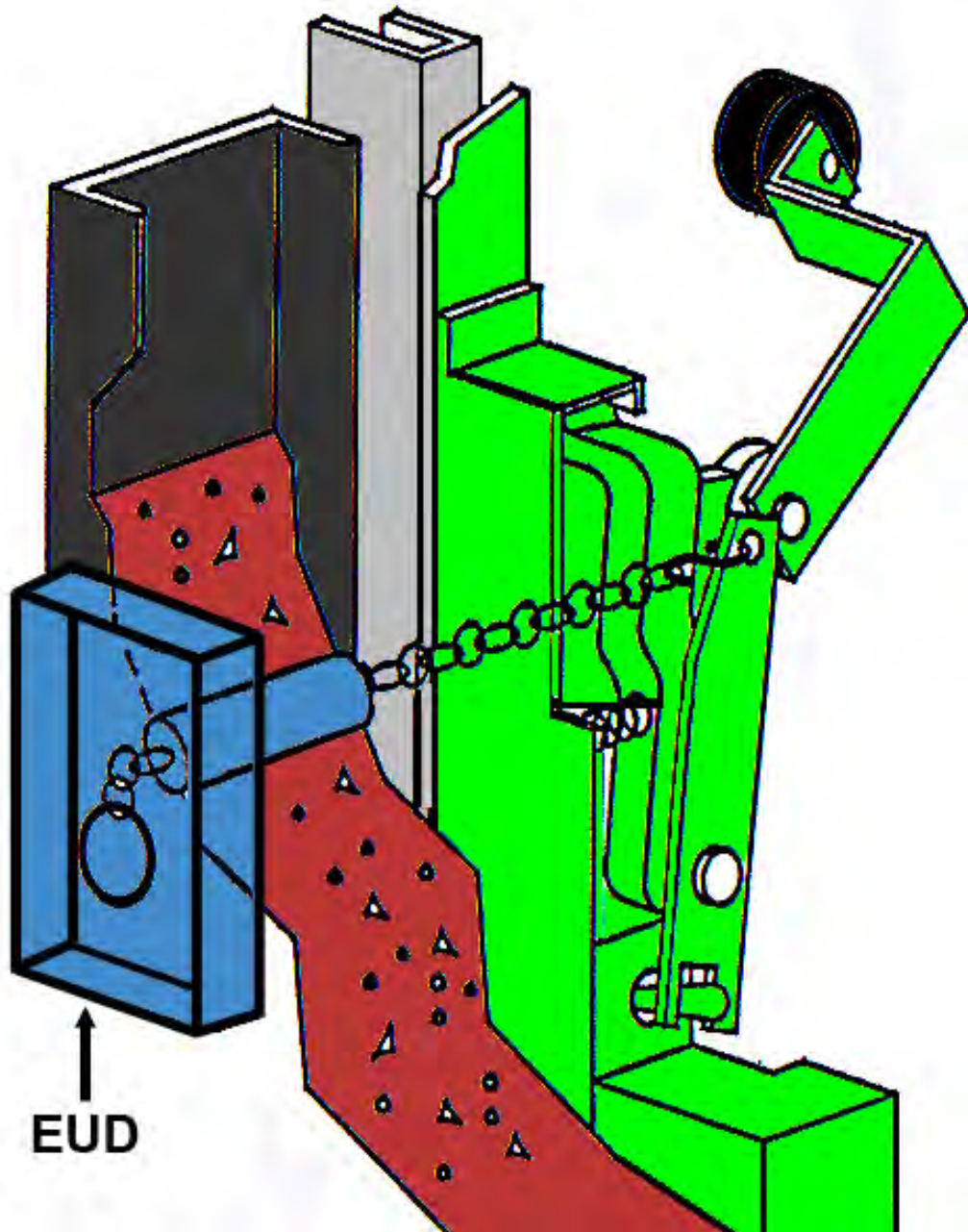
**OPEN LIMIT SWITCH** (located above the Interlock with roller up): Pull the Door Panel to FULL OPEN position. Adjust the Open Limit Switch so that the upper edge of the Lock Bar engages the Limit Switch approximately 6" (152mm) from FULL OPEN.

**CLOSED LIMIT SWITCH** (located below the Interlock with roller down): Pull the Door Panel to the FULL CLOSE position. Adjust the Closed Limit Switch so that the lower edge of the Lock Bar engages the Limit Switch approximately 6" (152mm) from FULL CLOSE.



## Emergency Unlocking Device (EUD) Installation

When applicable, install the Emergency Unlocking Device (EUD). Please refer to Courion's General Detail Drawings and note the designated landings for EUD installation.



### IMPORTANT!

The EUD should be aligned as closely as possible to the hole in the top of the Interlock Roller Arm.

EUDs are used by qualified personnel to unlock the Hoistway Doors when the car is not present at the landing. For this reason, please limit access to the Emergency Unlocking Device key.

## **Web Strap Installation**

Attach a Door Panel Web Strap to each Door Panel and secure Web Strap in the Web Strap Hitch.

## **Final Check**

You have completed the mechanical portion of the Hoistway Freight Door Installation. Before proceeding to the next step, please check the following items:

- Inspect all Door Guide Rails to insure that all mounting hardware is tight and secure. Apply a small amount of light oil (NOT GREASE) to the Door Guides.
- Manually open and close your Doors to insure that they move freely in the Door Guide Rails, and that the Door Operators/Sheaves turn freely.
- Inspect the Door Counter Weight Stack to insure that it is secure in the Counter Weight Guide Rails, and moves freely during the Door operation. Make sure all cotter pins are in place on the Counter Weight Stack and Chain Rod.
- Adjust the Door Shoes to limit side-to-side play to 1/16" (2mm). Use caution when tightening Door Panel Guide Shoes. Excessive force can strip threads in the Door Panel side angles.
- Adjust the Chain Bolt at the Counter Weight Stack to insure that the Door Panel reaches FULL OPEN and FULL CLOSE position.
- With the Doors in the FULL CLOSE position, insure that the MAXIMUM measure between the Locking Dog and the bottom edge of the rectangular hole in the Lock Bar is no more than 1/4" (6mm).
- Adjust the Open Limit Switch so that the upper edge of the Lock Bar engages the switch when the Door Panel is approximately 6" (152mm) from FULL OPEN.
- Adjust the Closed Limit Switch so that the lower edge of the Lock Bar engages the switch when the Door Panel is approximately 6" (152mm) from FULL CLOSE.



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