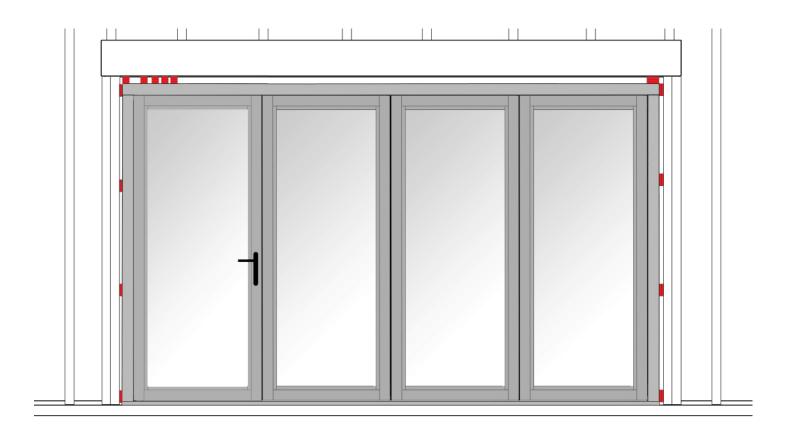


2515 Industry St. Oceanside, CA 92058



Magnaline Systems Block Frame Installation Manual

Aluminum top and bottom track with either aluminum or vinyl panels

Thank you for choosing Magnaline Systems!

Congratulations! You have purchased a multiple award winning door that is known for quality, ease of use, and innovative design. Whether you want to open up a room in your home or create a more attractive environment for you clientèle, the Magnaline Systems door is the perfect choice!

Your door has been assembled and inspected in the factory to insure that it meets order specifications and quality.

All items have been packaged to prevent damage in transit. Please inspect all door components to insure they have arrived without damage.

All Magnaline Systems are packaged and shipped with all components needed for assembly of the door. Panels are factory glazed and all operational hardware (head rail magnets and bolts, bottom track hinge blocks, and locks) are pre-installed.

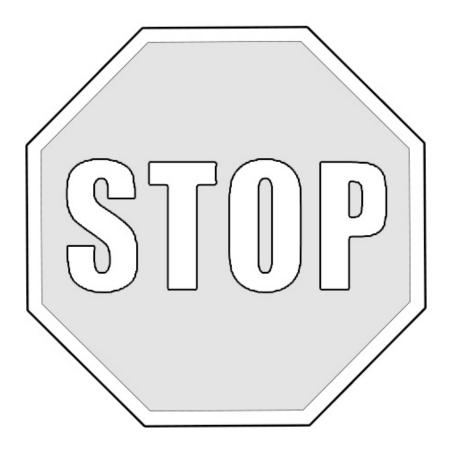
*We do not include sill pan, sealants, fasteners, bolts, shims or other parts needed to anchor and secure the door frame to the rough opening.

**A sill pan is recommended for all installations.

NOTE

Regulations regarding the use of glazed doors, storefronts, partitions and windows vary from state to state. It is the sole responsibility of the building owner, engineer, architect, contractor, or independent installer to verify that the products ordered fulfill federal, state, and local codes and regulations. Magnaline Systems does not assume any responsibility or obligation for failure of the building owner, architect, contractor or installer to fulfill the necessary safety and building codes, laws and ordinances.

PLEASE READ THE COMPLETE INSTRUCTIONS BEFORE YOU START INSTALLATION. THE Magnaline Systems door SYSTEM IS A UNIQUE OPERATIONAL SYSTEM THAT REQUIRES ATTENTION TO DETAIL AND PRECISION. FOLLOW EVERY STEP AND UNDER NO CIRCUMSTANCE CUT OR RESIZE ANY OF THE COMPONENTS. FAILURE TO COMPLY WILL RESULT IN MALFUNCTION AND OR DAMAGE TO PARTS RESULTING IN THE TERMINATION OF ANY WARRANTY, WRITTEN OR IMPLIED.



Before you begin installing your door!

Please inspect door for any damage that might have happened during shipping. This damage MUST be notated and Magnaline Systems must be notivided PRIOR TO INSTALLATION of the door. Please provide photos of any damages PRIOR to installation.

Installing Your New Magnaline Systems door

Your Magnaline Systems door is a specailty custom manufactured product. Unlike typical sliding doors there are many more moving parts to this door and in order to assure your door operates properly it is important that time and care are put into every installation.

A common question is, "How long should the installation process take?"

While every installation is different, we find that it takes an average of 1.5 - 2 hours per panel for door installation professionals. Thus, a four panel door would take 6-8 hours to install.

Taking your time to install the bottom track 'level' from side to side and "inside to outside" is essential for your door to operate properly. We find that having a laser level is best for this. While these range from \$100 - \$300 dollars each, they are a good investment to insure your door operates properly. (See page 15)

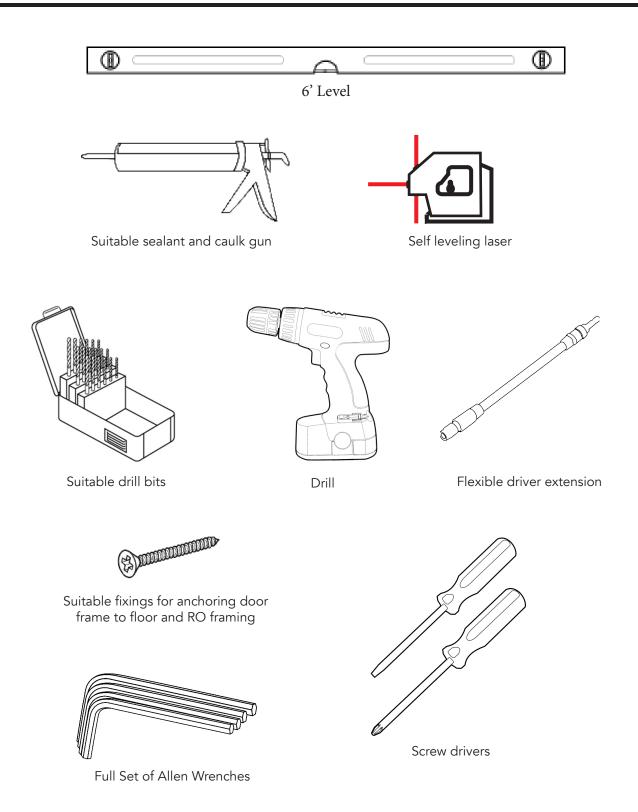
Second to getting the bottom track installed level is installing the top track plumb above the bottom track. The number one item to look at is the 'pivot hole(s)' in the top and bottom tracks. The top track must be installed so that the swing door pivot hole(s) is/are directly above the bottom track pivot hole(s). (See page 16) Once again, this is where a lasar level comes in handy. Next you will shim the top track so that it cannot move out of position over time as the doors is opened and closed. (See page 17)

Once your bottom and top tack are possitioned properly and secured in place you will install your swing doors and sliding panels. If your tracks are installed properly (level and plumb) this step will be fairly simple and straight forward. If at anytime you have problems with alignment for the swing door or sliding panels we recommend that you double check the tracks for level and plumb before continuing.

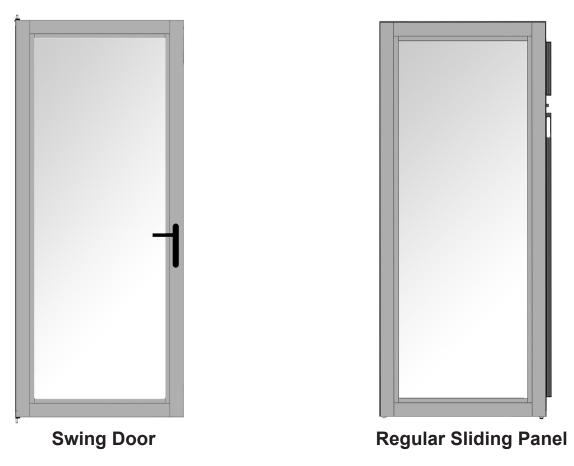
Each step of the installation process is covered in this manual and by carefully following all directions you will find your door installation to be straight forward and uneventful. If at anytime you have any questions, feel free to call us at 760-722-1250 and we will gladly answer any of your questions.

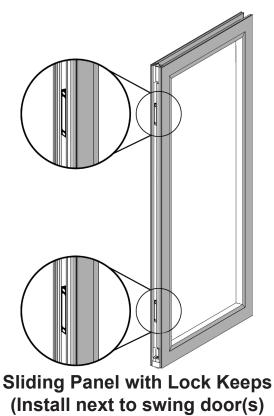
Thank you for your purchase and "Good Installing" to you!

Tools Needed



Panel Descriptions





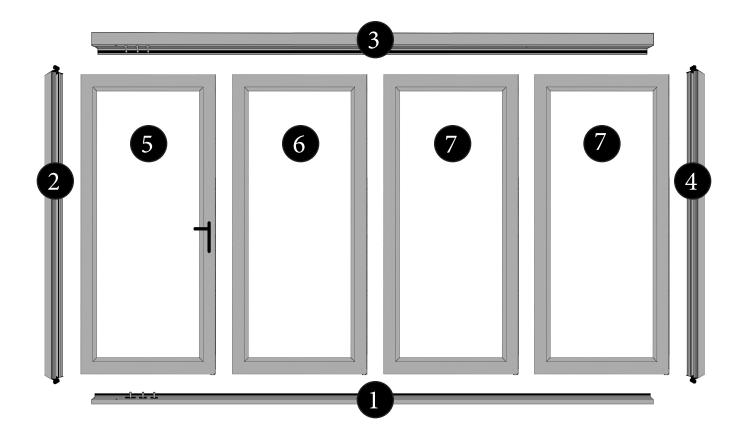
DRAWING EXAMPLE OF A 4 PANEL DOOR WITH 1 SWING DOOR

NOTE: VIEWED FROM OUTSIDE LOOKING IN

The drawing shows the labels of the components and the sequence of the panels. Installation process is as follows

- 1. Bottom track
- 2. Swing door jamb
- 3. Top track
- 4. Sliding panel jamb
- 5. Swing door
- 6. First sliding panel
- 7. Second and subsequent sliding panels

Top and bottom tracks are pre-drilled for anchoring, jambs need to be drilled and fixed following the suggested pattern. The first panel to be installed is always the swing door, and then the subsequent panels in order. Always make sure each panel is safely secured before installing the next panel.



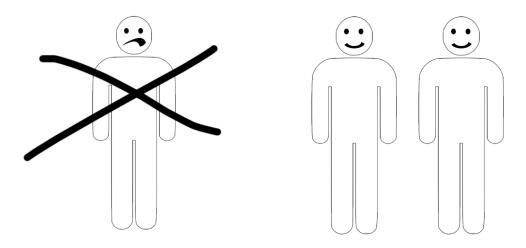
Safety First

Safety

- Thoroughly familiarize yourself with all parts of the door system as well as the installation process and steps.
- Do not work alone. Two or more people are required to safely move and install panels.
- Be careful when handling glass. Clear the area around the opening where the door will be installed so as to avoid contact with anything that might contact and break the glass in the panels.

Handling Components

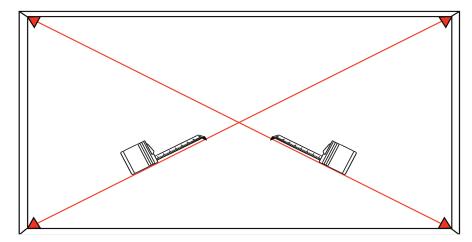
- Store all door/window components in a safe and sheltered area and out of construction traffic.
- Do not drag or drop components. If needed, carry with the help of a second person.
- Do not step on any of the components or place heavy items on top of them.
- Protect components from getting scratched or damaged.
- Wood components need to be kept away from weather exposure and extreme temperature changes until a finish has been applied.
- !! Do not stack or lean door panels against wall. Can cause frame warpage.



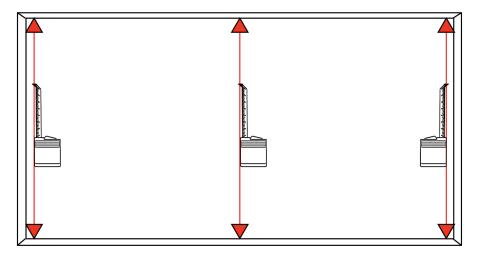
WARNING: Attempting installation without an assistant can lead to personal injury or damage to door. Always have help when installing your Magnaline Systems door.

Verify Opening Is Square

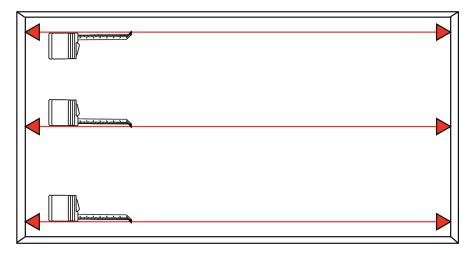
Recommended RO (Rough Opening) is 1" larger than net door size in width and height.



Measure corner to corner for square.



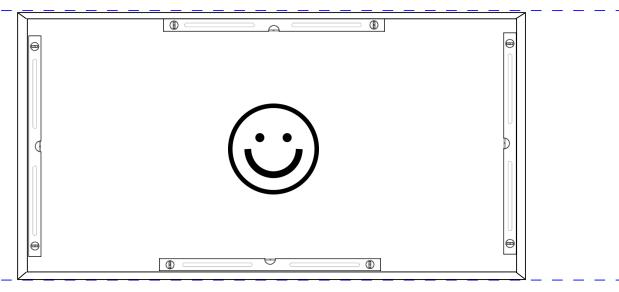
Measure top to bottom at left, center, and right to confirm proper height.



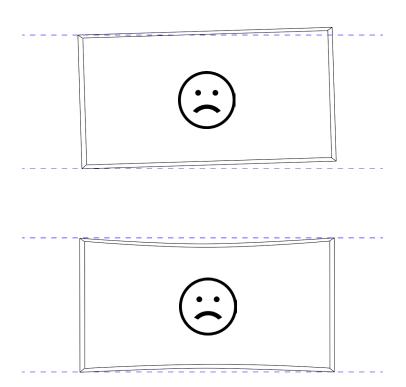
Measure side to side at top, middle and bottom to confirm proper width.

Verify Opening Is Plumb and Level

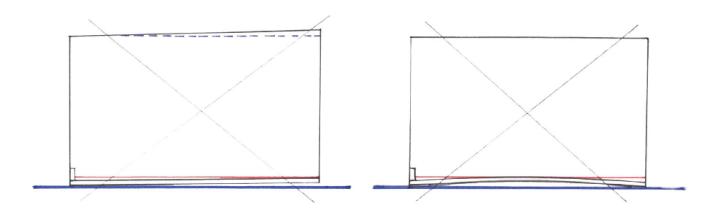
2



Use 6' level to confirm bottom & top of opening are level. Confirm sides are plumb.



IMPORTANT INSTALLATION NOTE: It is extremely important that every component of the frame be installed perfectly square, plumb, level and flat. Failure to do so will result with a door that does not operate and function properly and as designed. If alignment/function issues arise after installation, the first trouble shooting step is to affirm the frame has been installed properly and to specifications.



! Before You Start! We recommend you always use a sill pan!

We recommend you use a sill pan for all Magnaline Systems door installations in order to insure no moisture intrusion under the door track. Falure to use and properly install a sill pan can result in water intrution unrelated to the door itself and is not part of the Magnaline Systems door warranty. If in doubt about how to install a sill pan please consult with a properly licensed contrctor or door installer.

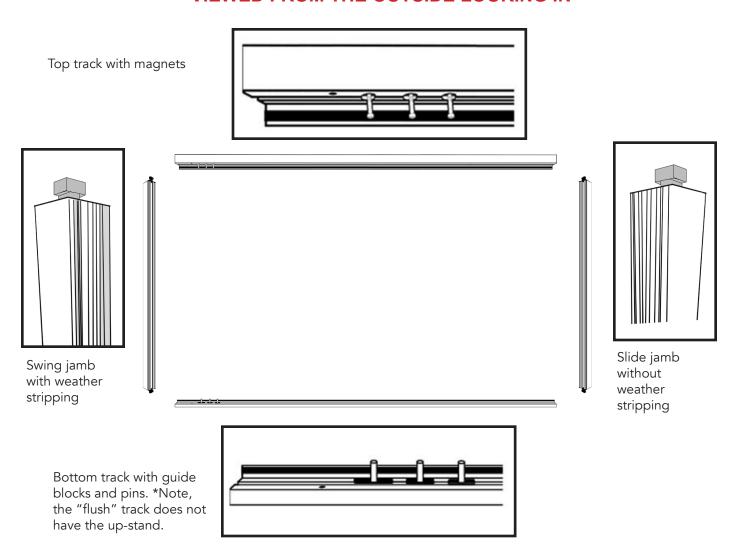
Section 3: Frame Assembly and Installation

3

BEFORE YOU START:

Lay out components in their proper position. Double check if rough opening has been properly prepared for installation.

VIEWED FROM THE OUTSIDE LOOKING IN

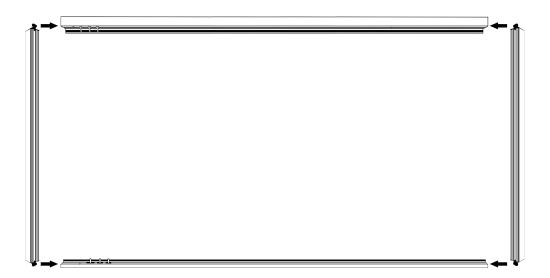




Use the diagram above when placing bottom track. The "Up-stand" track has a 3/4" up-stand on the <u>inside for an out-swing door</u>. The "Flush" track has weather stripping that is on the <u>inside for an in-swing</u> door and <u>outside for an out-swing</u> door.

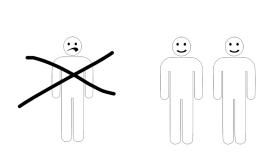
Block Frame Assembly:

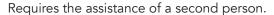
- 1. Place top rail, left jamb, right jamb, and bottom track on ground in position as illustrated in the image below.
- 2. Slide the top and bottom jamb connectors into the corresponding slots in the top rail and bottom track.

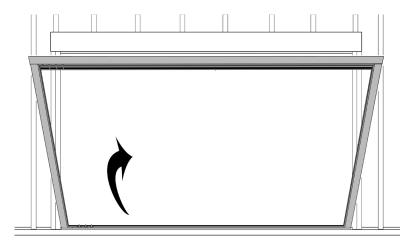


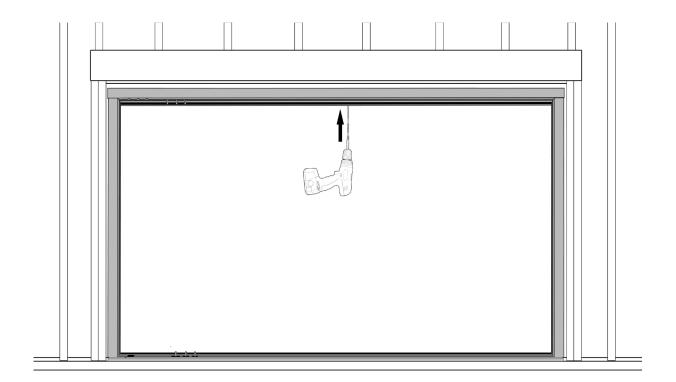
Place Frame Into Opening:

- 1. Confirm floor where track is to be installed is level and smooth. If any section of the floor in the opening is slightly higher, take note as this is where you will be leveling the track to.
- 2. Install sill pan. (Not included)
- 3. With the help of a second person, stand frame up and place into properly prepared opening.
- 4. Once the frame is positioned where you want your door to be installed, use a temporary set screw or suitable fastener to hold frame up.









- 1. Position frame in center of rough opening being sure to allow room on each side of door frame for shimming.

 2. Temporarily secure the top track to header with a screw or other fastener.

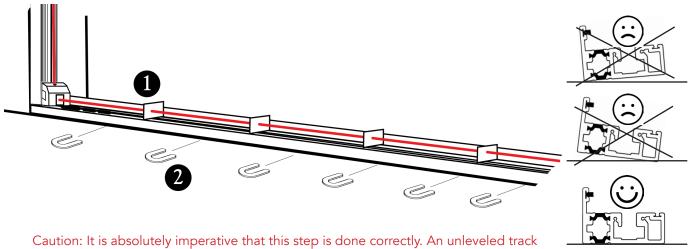
Bottom Track Leveling, Shimming and Securing

IMPORTANT: Bottom track **MUST** be flat and level from jamb-to-jamb and not tilt inward or outward. The Magnaline Systems door will not operate properly if bottom track is not installed correctly. If you have any questions regarding the installation of the bottom track, please contact Magnaline Systems prior to installation. **Magnaline Systems does not warrant installation related issues.**

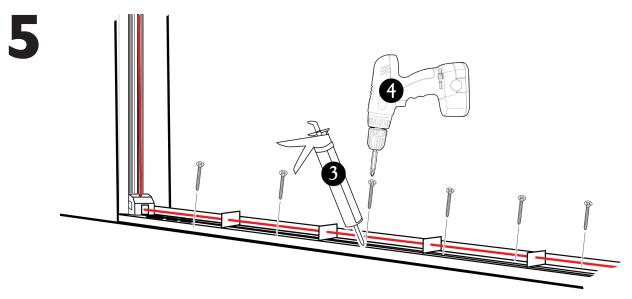
4

BOTTOM TRACK LEVELING AND SHIMMING:

- 1. After door frame is set in opening and temporary holding screw is in place in top frame, locate the highest point along track. This is the point from which you will level the rest of the track to.
- 2. Using a laser level from the (1) highest point, add shims at every (2) pre-drilled hole in the track until the track is completely level from end to end. Caulk the pre-drilled holes in the bottom track
- 3. Using appropriate anchors, secure the track to the floor.
- 4. Once all anchors are in, confirm track is level. Make adjustments as necessary.



Caution: It is absolutely imperative that this step is done correctly. An unleveled track will lead to mis-alignment and poor functioning of doors operation.

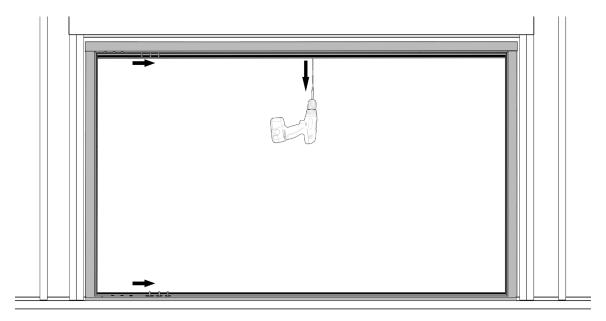


Properly installed bottom track installed level on a structurally sound floor and is equally spaced between sides of opening.

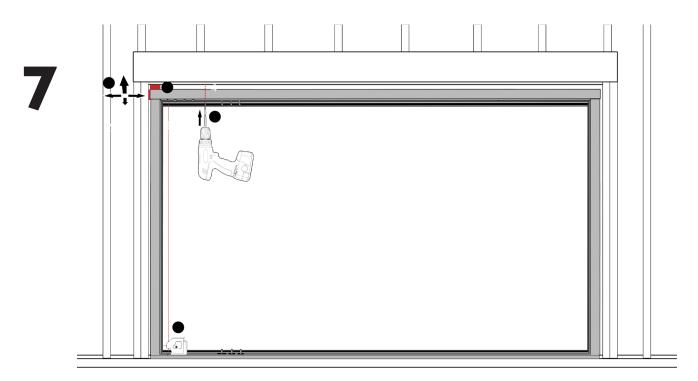
Aligning and Shimming Top Track



POSITIONING AND SECURING TOP RAIL



- 1. Slide the magnet block and bottom pins towards center of opening and away from edge door.
- 2. Remove temporary hold screw.



- 1. Place a self leveling laser on the bottom track with the down facing laser aligned to the outside edge of the bottom swing door pivot hole.
- 2. Adjust the top track until the swing door pivot hole in the top track is in perfect alignment with the hole in the bottom track.
- 3. Shim the top corner (above the jamb) and end of top track.
- 4. Secure the top track in place.

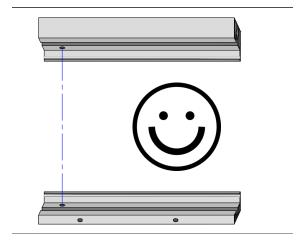
Before proceeding to the next step...

Before we go to the next stem, let's take a moment to make sure you pay attention to a few very important details.

1. Swing door pin hole alignment:

After confirming that the bottom track is level, the next point to ensure is that the swing door pivot pin holes are properly aligned.

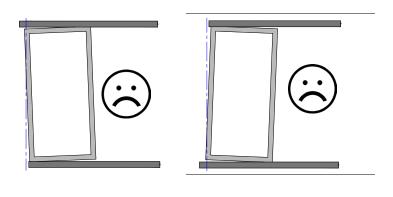
Mis-aligned holes will prevent the door from operating properly.



Examples of top track out of alignment (left/right):

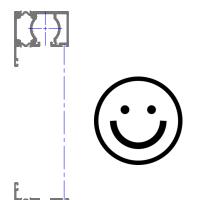
Both pictures below illustrate what happens when the top and bottom tracks are not aligned properly.

Mis-aligned holes will cause the swing panel to be out of alignement and will result in swing panel hitting the top or bottom track.



2. Top and bottom track alignement:

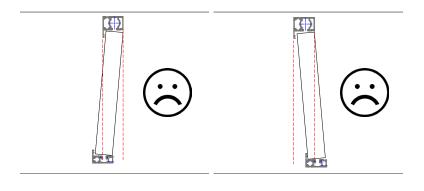
Before securing the oposite end of the top track to the header, make sure that it is plumb above the bottom track.



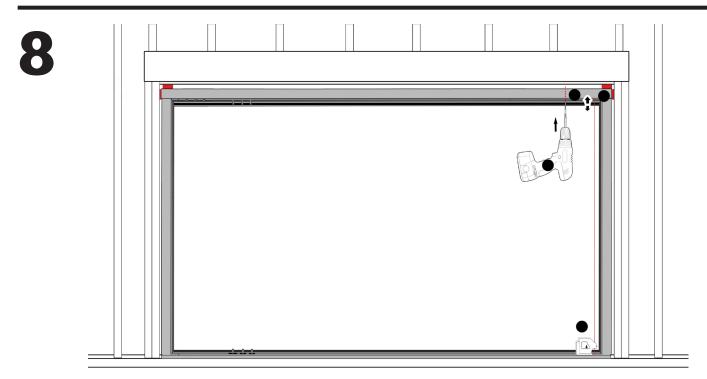
Examples of top track out of alignment (inside/outside):

Both pictures below illustrate what happens when the top and bottom tracks are not aligned properly.

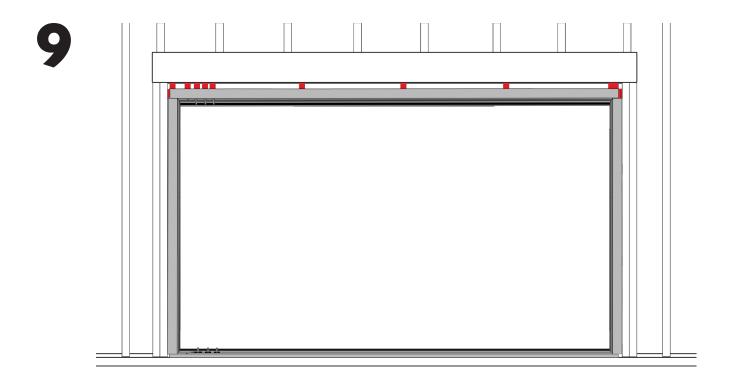
Tracks that are out of plumb (inside/outside) will result in panles that run at an angle. This will make moving the panels more difficult and result in uneaven wheel wear.



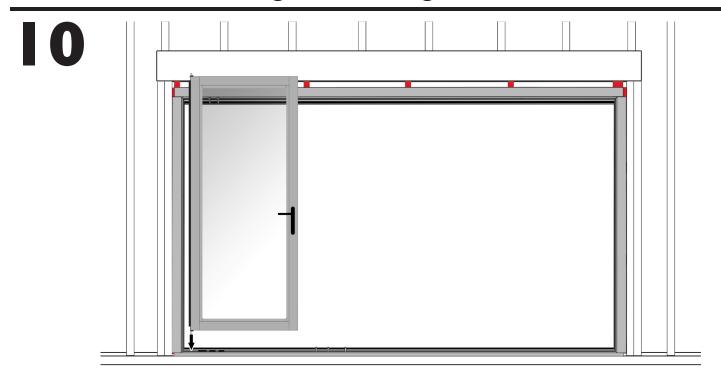
Continue installing top track



- 1. Place a self leveling laser on the bottom track with the down facing laser aligned to the outer edge of the bottom track.
- 2. Adjust the top track in and out until it is plumb with the bottom track.
- 3. Shim the top corner (above the jamb) and end of top track.
- 4. Secure the top track in place.
- 5. Add shims above each top pivot pin hole. See image 9.

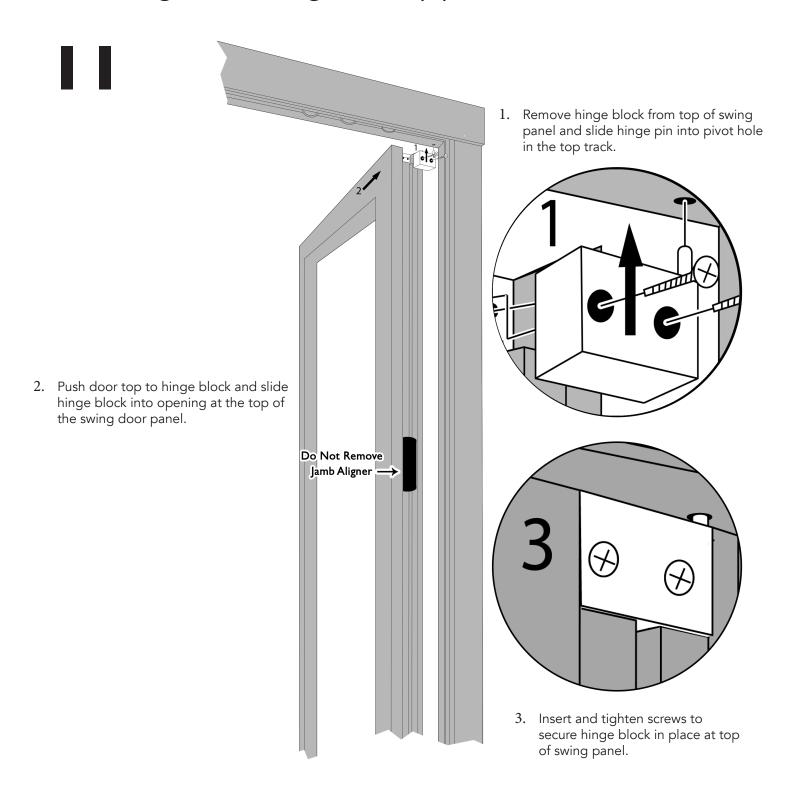


Section 4: Installing the Swing Door



- 1. Align the bottom pin of the swing door with the swing door pivot pin hole in the bottom track.
- 2. Gently lower the swing door panel to insert pin into hole. Be care to avoid contact between pivot pin and powder coating of bottom track as it may scratch the powder coating.

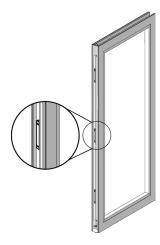
Installing the Swing Panel(s)



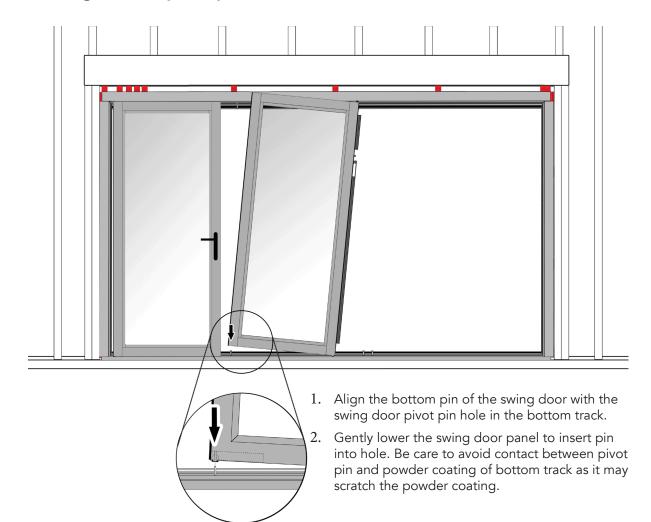
Section 5: Installing the Sliding Panels

12

Note: Install sliding panel(s) with lock keeps next to swing door(s).



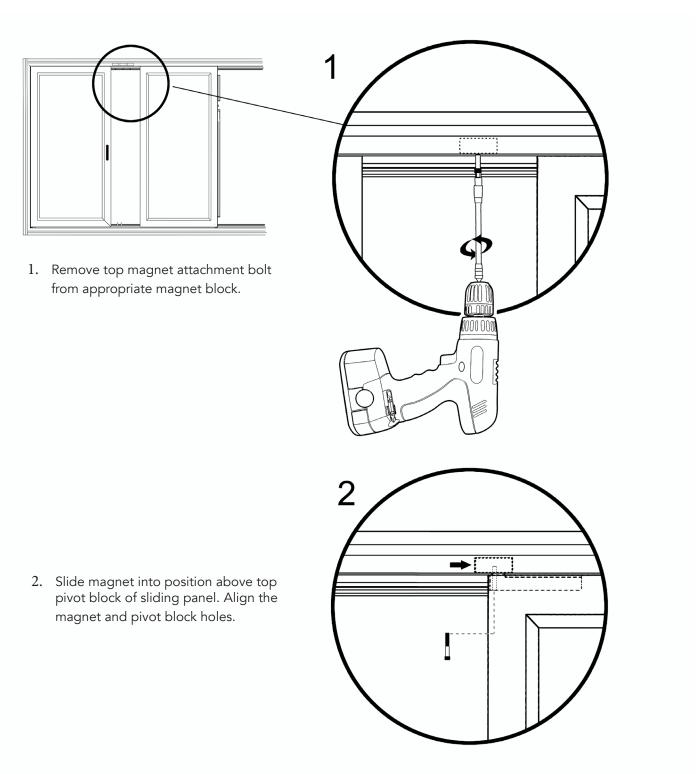
Inserting bottom pivot pin.



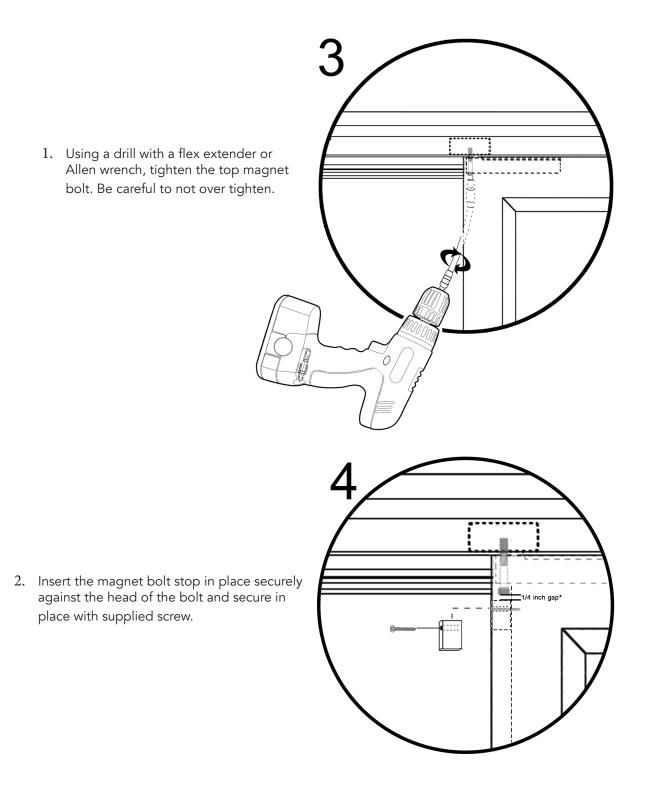
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Connecting Top Track Magnet Block to Panel

13

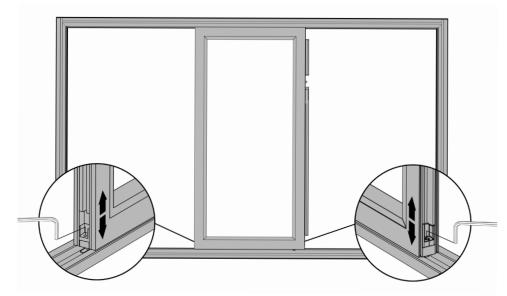


14



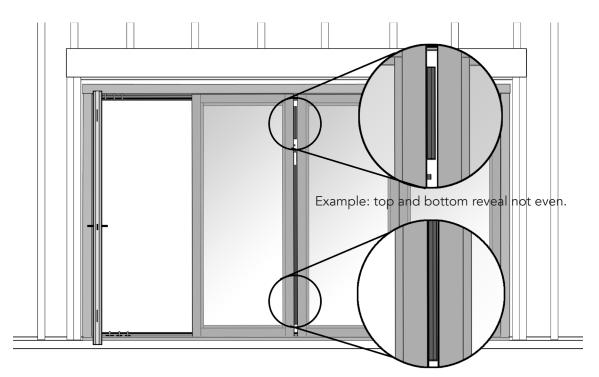
Adjusting Reveals for Sliding Panels

15



Use the reveal adjusters located on both sides of the sliding panel to adjust your reveals; the top-to-bottom alignment of the door panels.

Caution: The reveal adjusters are for slight adjustment only. Maximum Adjustment Limit: 1/16th (2mm) in either direction.



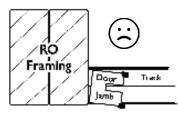
- 1. Slide panels apart just enough to find a flat (non weather stripping) edge to align doors to.
- 2. Check top and bottom to see if there is a larger gap at top or bottom. (In example above, there is a larger gap at the top.)
- 3. Adjust reveal adjuster to equalize the gap. NOTE: If there is more than a quarter inch difference, there is a high likelihood that the track is not level and straight.

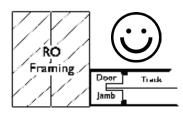
Shimming and Securing Jambs



IMPORTANT: When securing jambs to rough opening framing, please make sure jambs are squared with top and bottom track. Twisted jambs, and out of line jambs, will prevent the door from sealing and operating correctly and will result in damaged weather stripping.



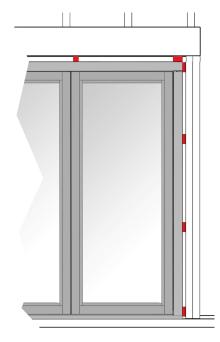




Swing Door Jamb

- 1. Close swing door(s).
- 2. Slide jamb toward swing door until it is snug up against swing door.
- 3. Shim between jamb and rough opening framing.
- 4. Secure jamb in place making sure shims will not fall out.





Sliding Panel Jamb

- 1. Move sliding panel(s) towards closed swing door making sure to leave enough room for swing door to open and close without obstruction.
- 2. Slide jamb toward sliding panels
- 3. Shim between jamb and rough opening framing.
- 4. Secure jamb in place making sure shims are secure and will not fall out.

Handle Set Installation

17

A Phillips screwdriver is required.

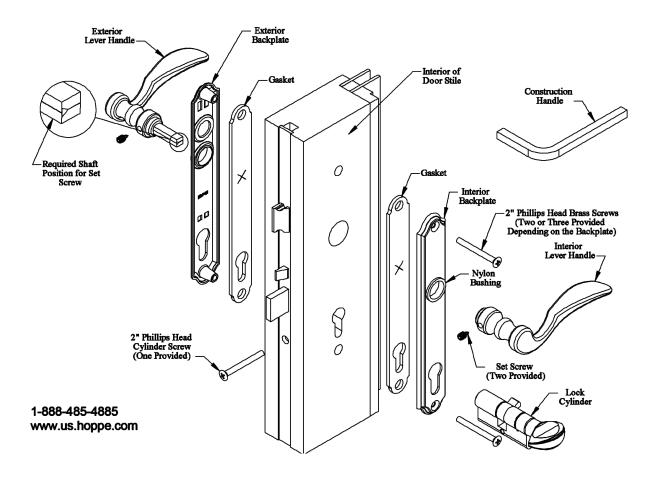
A hex wrench for set screw is provided in the hardware package.

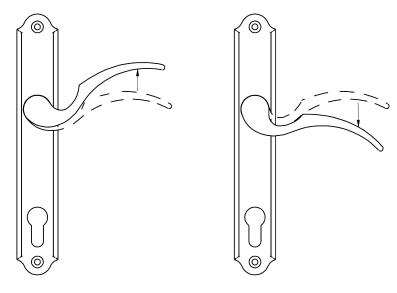
To prevent damage to the handle set during the construction phase, use the enclosed construction handle to operate the door. Lift the handle to engage the multipoints. Push down to disengage.

Use water and a soft cloth to clean. Do not use brass cleaner or solvent based cleaning agents as they will remove the protective coating on the hardware.

Note: Handles and backplates vary by style but application is the same.

- Apply the backplate gasket to the inside of he exterior and interior backplates. Push gaskets firmly into place and ensure a tight seal. Attach interior and exterior backplates to the door and fasten loosely with the screws provided. Note: The screw heads must be on the interior side of the door.
- 2. Insert the two-piece handle shaft into one handle. Be sure to orient the shaft as shown below. Screw the set screw until flush with handle using the hex wrench provided. Insert the handle with shaft attached through the escutcheon plate and door gear handle hole until extending out opposite side of door.
- 3. Install remaining handle onto shaft, pressing tightly to the backplates. Tighten the handle set screw with hex wrench. Screw until flush with handle.
- 4. Insert the keyed cylinder from the interior side of the door until it is flush with the exterior backplate. Install the cylinder screw in the screw hole below the deadbolt in the edge of the door to secure in place.
- 5. Hand tighten the backplate screws to complete assembly.





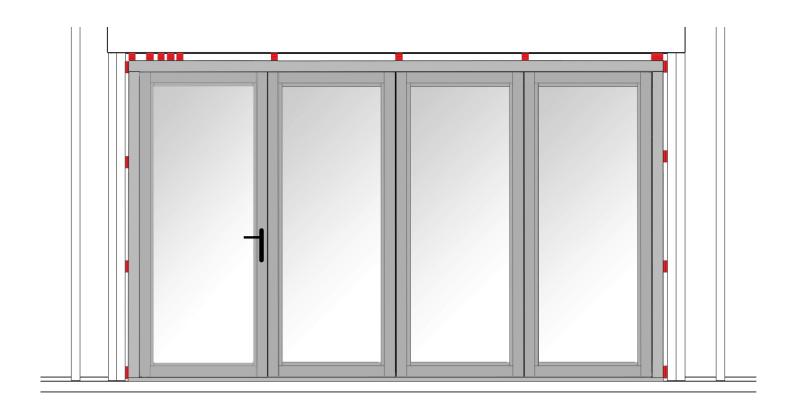
To lock, lift the handle to engage the multi-points before engaging the deadbolt.

Use the key or the thumbturn to engage the deadbolt after the multi-points are engaged.

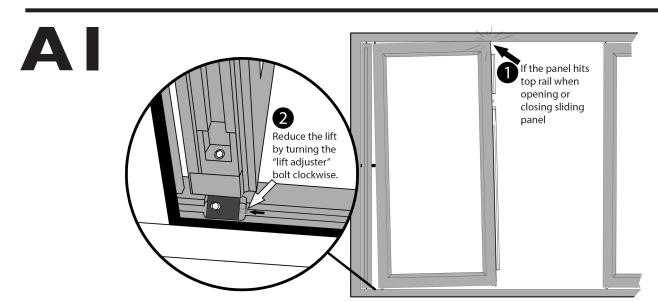
To open, disengage the deadbolt with a key or the thumbturn, push the handle down until multi-points are retracted and then open door.

NOTE: Activation of the multi-point hardware will remain the same regardless of handle style.

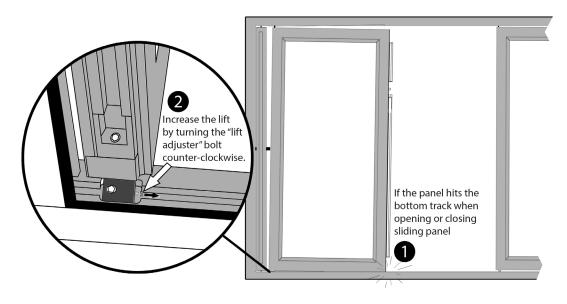
Congratulations, Your Install is Complete!



Adjusting Lift for All Sliding Panels



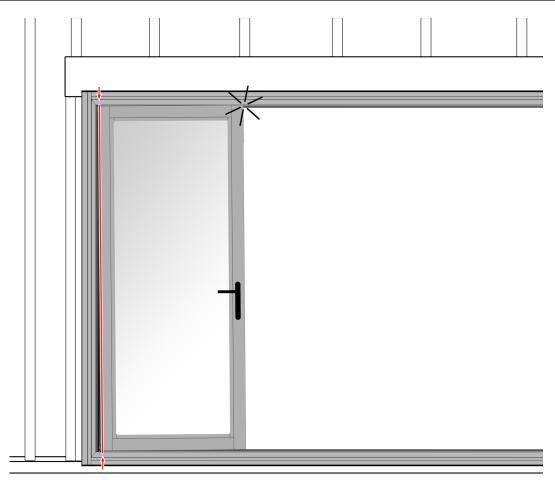
- 1. If top of swing panel contacts top rail.
- 2. Reduce the "lift" adjusting the lift adjuster by using an alen wrench turn the lift adjust bolt clockwise. This will shorten the bolt and reduce the amount of lift on all the sliding panels.



- 1. If the bottom track wheel assembly does not clear track when pivoting the sliding panel.
- 2. Increase the "lift" turning the lift adjust bolt counter-clockwise. This will lengthen the bolt and increase the lift on all the sliding panles.

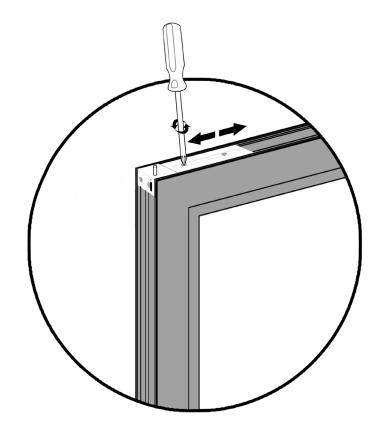
Adjusting Top Swing Door Hinge





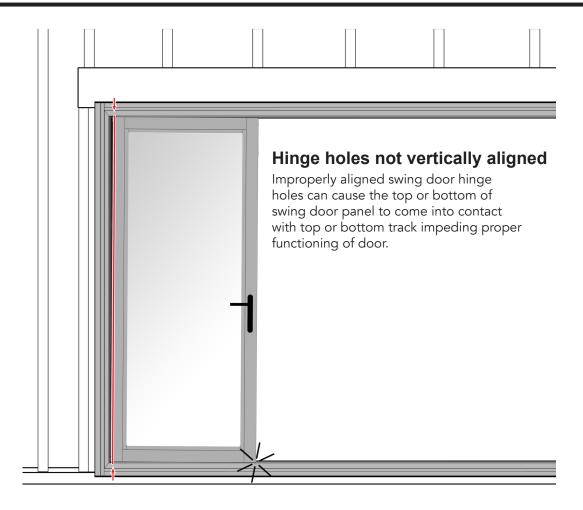
How to Adjust: 1. Loosen top hinge block screws. 2. Move top block in or out.

- 3. Re-tighten hinge block screws



Adjusting Bottom Swing Door Hinge

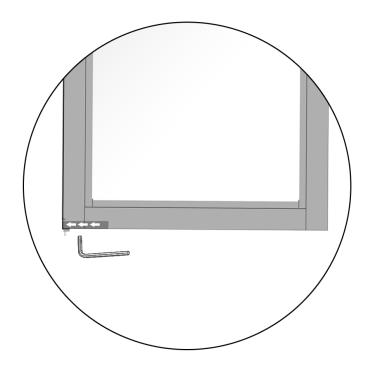




How to Adjust:

- 1. Remove swing door.
- 2. Loosen the bottom hinge block Allen screws.
- 3. Slide bottom hinge block away from center of door panel.
- 4. Tighten bottom hinge block Allen screws.
- 5. Re-install swing door.

Note: Bottom hinge block is for slight adjustments only. If more adjustment is needed, remove all panels and using a laser level, adjust top track so that both the bottom track hinge hole and the top track hinge hole are in alignment. Then reinstall swing door to confirm proper function before installing sliding panels.



Trouble Shooting

What to do if your door is not functioning properly.

- 1. Check to confirm track is straight and level. (Self-leveling laser required)
- 2. Confirm top rail is plum above bottom track (Self-leveling laser required)
- 3. Confirm frame is installed square.
- 4. Confirm jambs are positioned properly. Jambs should be tight enough to engage all vertical seals between doors, but not so tight that swing door binds when opening or closing.
- 5. If you have check all items and still have issues with door functionality, please call 775-742-3364 during regular business hours for assistance.