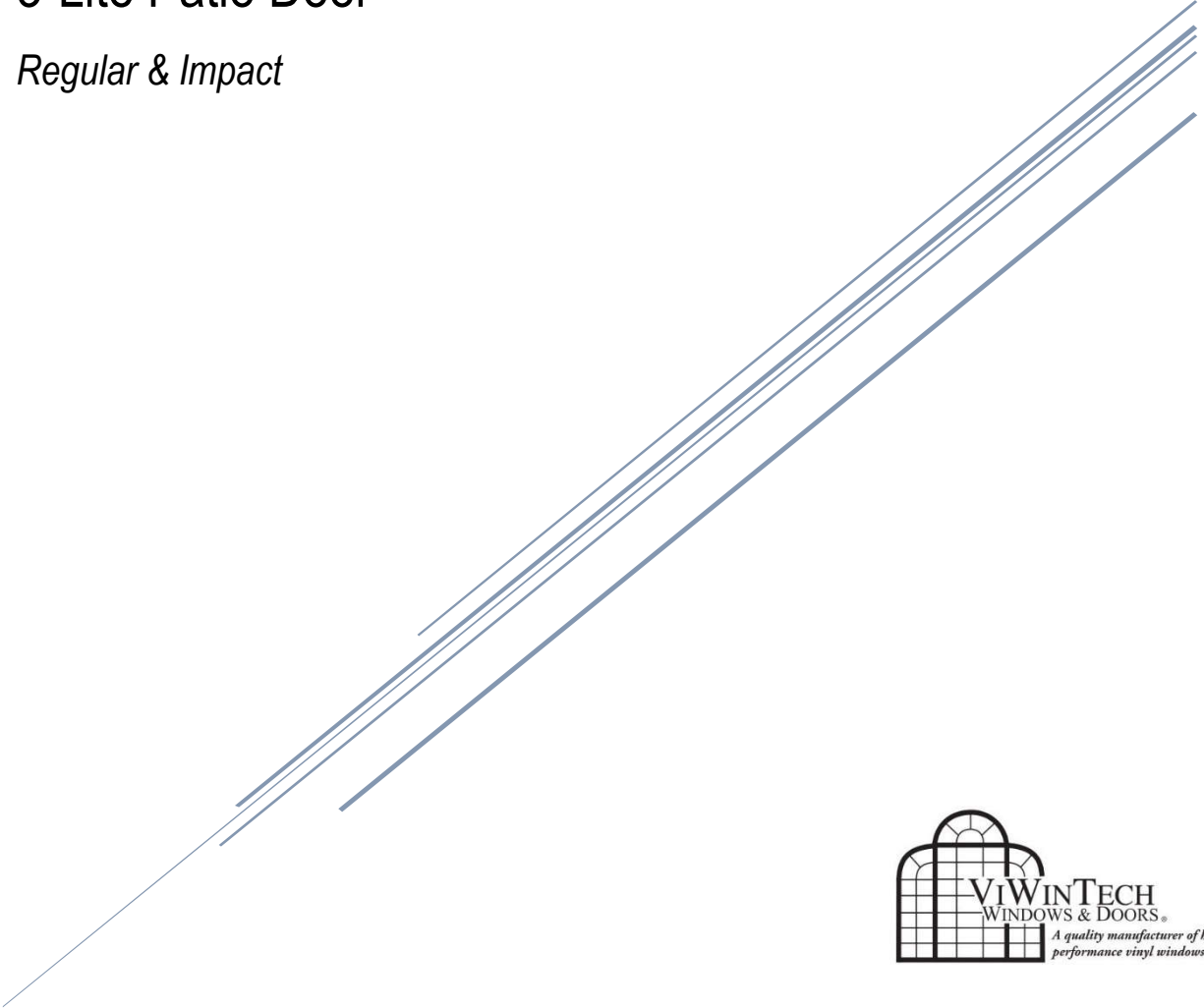


# GRAND VISTA 1100 SERIES PATIO DOOR

Knock Down Assembly Instructions

3-Lite Patio Door

*Regular & Impact*



**LET US ENHANCE YOUR VIEW**

This assembly guide is for the ViWinTech, inc. 1100 series sliding glass vinyl patio door. This assembly guide does not cover installation, the installer is responsible for proper installation guidelines in accordance with any local/state applicable codes and/or ordinances. Sealing and flashing strategies for overall water resistance of installation shall be done by the installer following industry standards and FMA/AAMA recommendations. ViWinTech is not responsible for the quality of installation.

**IMPORTANT:** Read the instructions and familiarize yourself with the door parts and pieces before beginning assembly.

**Safety:**

- Use an appropriate number of people to lift and install the doors to prevent injury and/or damage to the doors.
- Use safe lifting techniques.
- Always wear protection gear such as safety glasses, gloves, ear protection, ect...
- Operate hand/power tools safely and follow manufacturer's operating instructions.
- Use caution when working at elevated heights.
- Store doors in a dry, well ventilated area in a vertical position.
- Metal fasteners and components may corrode when exposed to preservative-treated and/or fire retardant-treated lumber. Use approved fasteners and components to fasten doors. Failure to do so may result in injury, product or property damage.

**Table of Contents:**

Part Descriptions.....	Page 3
Patio Door Handing Options.....	Page 4
Tools/Equipment Needed .....	Page 4
Frame Assembly ( <i>Same for Impact &amp; Non-Impact</i> ).....	Page 5
FSL 3-Lite Door Assembly ( <i>Impact</i> ) .....	Page 6
FSL 3-Lite Door Assembly ( <i>Non-Impact</i> ).....	Page 9
Handel Set Assembly and installation.....	Page 12

## Part Descriptions



Threshold Ramp  
*Non-Impact units only*



Fixed Panel Bracket



Sash Stops



Roller Adjustment Hole Cover



Astragal Hole Cover



3-Lite Door Astragal



Track Cover



Weather-Strip Pad



Impact Bracket  
*Impact Doors Only*



Frame Assembly Screws  
#8 x 3" Pan Head



Astragal Screw  
#10 x 2 1/2" Pan Head



Impact Bracket Screw  
#8 x 1 1/2" Flat Head

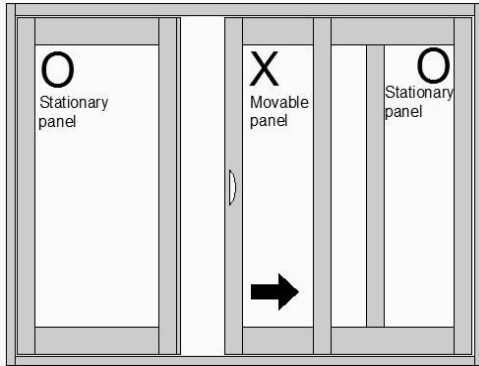


Fixed Panel Bracket Screw  
#8 x 3/4" Flat Head

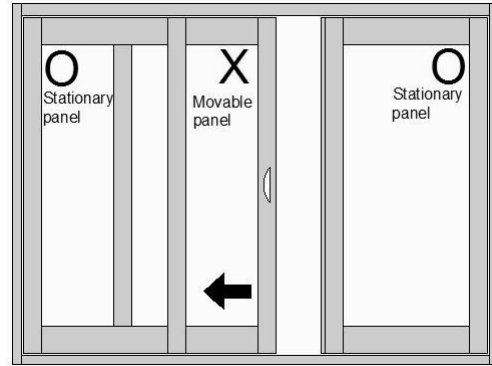


Fixed Panel Bracket Screw  
Fixed Panel to Jamb Screw  
#8 x 1 1/4" Flat Head Self Tapping

## Patio Door Handing Options As viewed from outside



FSL-3Lite Left-Hand



FSL-3Lite Right-Hand

### Tools/Equipment Needed *(additional tools may be required for special conditions or to aid in the removal of existing doors)*

- Tape Measure
- 4' level
- Hand Drill
- #2 Phillips Bit
- 4" 1/8" Drill Bit
- 4" 5/32" Drill Bit
- #2 Phillips Screwdriver with 6" shaft
- Caulking Gun
- Rubber Mallet
- Step Ladder
- Clear Silicone Caulk
- Plastic Shims (breakaway type horse shoe shims are ideal)

## Frame Assembly (Same for Impact & Non-Impact)

1

### Preparing Your Work Area

Prepare a flat work area to assemble the door frame. Remove the door frame pieces and components.

**NOTE: REFER TO PACKING LIST TO ENSURE THAT ALL LISTED MATERIALS ARE INCLUDED.**

2

### Frame Assembly

Layout the vinyl head, sill and side jambs. Be sure to clean any dirt or debris from the gaskets on the ends of the jambs.

**NOTE: The sill, roller track, and panel spacers will be different on an impact unit versus a non-impact unit.**



Non-Impact

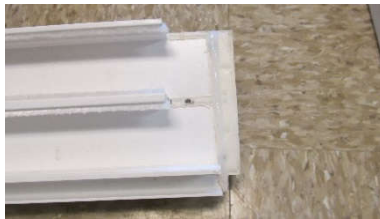
Impact

**IMPORTANT: WHEN ASSEMBLING THE FRAME MAKE SURE YOU ATTACH THE LEFT AND RIGHT JAMB TO THE CORRECT SIDE OF HEAD AND SILL.**

3

### Applying Silicone Sealant

Apply a 1/4" bead of silicone sealant to top edge of the gasket at each end of the side jambs.



4

### Attaching Jamb to Head and Sill

Fasten the side jambs to the head and sill using (3) #8 x 3" pan head screws



**NOTE: Do not over tighten the screws, this could crush the vinyl members and damage the frame.**

5

### Check Rough Opening

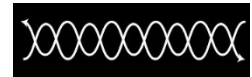
Make sure opening is correct size, 1/2" larger in width and height than exact door size. Check to make sure the opening is plumb and level. Measure opening width at top, middle and bottom, if not the same, correct at this time. Measure opening height along the entire length of the opening to make sure there is no rise in the floor or dips in the header, correct as necessary. Check the diagonal dimensions of the opening and make sure they are within 1/4" of each other.

6

### Caulking the Sill

Once the sill is level apply a minimum 1/2" bead of silicone caulking across the sill of the opening in a crisscross pattern.

**NOTE: If door is to be installed on wood substrate, ViWinTech recommends the use of a sill pan flashing system.**



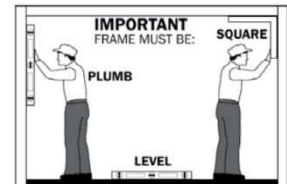
7

### Installing the Frame

Lift frame and place into building opening. Be sure to keep sill level and side jambs plumb.

**NOTE: Leave head installation screws out until after fixed panel installation to allow enough clearance for fixed panel.**

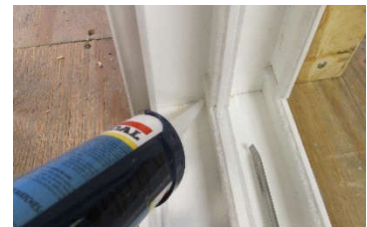
**IMPORTANT NOTE: Install frame per industry standards and applicable installation instructions and building codes.**



8

### Caulk

Apply silicone caulking on both sides of the sill where sill butts up to side jambs.



# FSL-3 Lite Door Assembly (Impact)

1

## Attaching Fixed Panel Brackets

Slide the lower fixed panel brackets into the bottom of the fixed panels between the interlock and the panel. Do not fasten at this time.



*NOTE: Upper fixed panel bracket will already be attached to the panel.*

2

## Installing Fixed Panels

With the head installation screws out, from the exterior, insert the top of the fixed panel into the outer track of the head in the center of the frame. Swing the bottom of the panel in and place onto the sill track, one side of the fixed panel will rest on the sill spacer. Push panel over onto the sill spacer and into the side jamb. Repeat the process for the other fixed panel.

*NOTE: From outside looking in, fixed panel with interlock will go on Right side for Left hand door, Left side for Right hand door.*

*NOTE: The glazing bead around the perimeter of the glass will be toward the interior.*



3

## Fastening Fixed Panel Brackets

Tap the lower fixed panel bracket down until it contacts the sill. Install (8) #8 x 3/4" flat head screws into the pre drilled holes in the sill and head. Install (1) #8 x 1 1/4" flat head self tapping screw through hole in panel interlock into lower panel bracket. Repeat the process for the other fixed panel.

*NOTE: Head installation screws can be installed after fixed panel brackets are secured.*



4

## Fastening Fixed Panels

After the fixed panels are in place, drill 1/8" pilot holes into the weather-strip track on the jamb, 8" from each end and one in the center. The drill bit needs to be a minimum of 4" in length to prevent damage to the frame. Install (3) #8 x 1 1/4" flat head self tapping screws into each pilot hole.



5

### Installing the 3-Lite Astragal

Run a bead of caulk down the astragal between the sash pocket snap and the screen track. Position astragal with screen track facing exterior. Insert end of astragal into sill track and swing top into head track. Snap astragal in place then drill 5/32" holes into panel at each two-stepped screw hole location. Anchor astragal to panel using (3) #10 x 2 1/2" pan head screws. Install 3/8" vinyl hole caps over holes.

*Note: When drilling 5/32" pilot holes in panel, use care not to damage vinyl around two-stepped hole.*



6

### Install Exterior Sill Cover

Install the exterior sill track cover between the fixed panel and the astragal by inserting cover in track with spring facing exterior. Use a mallet to snap into place.



7

### Install Exterior Head Track Cover

Install exterior head track cover between the astragal and the fixed panel by inserting cover in track with spring facing exterior. Use a mallet to snap into place.



8

### Install Interior Head and Sill Track Covers

Install interior head and sill track covers between astragal and jamb by inserting cover in track with spring facing interior. Use a mallet to snap into place.



9

### Install Sash Stops

Install the sash stops into the head and sill on the inside track.



10

### Install Interior Jamb Track Covers

Install interior jamb track covers by inserting covers with springs facing interior. Use a mallet to snap into place.



11

### Install Weather-Strip Pads

Install a weather-strip pad at the notch on each end of the fixed panel interlock. The pad has a center fin, when applying be sure the fin is in a vertical position. It may be necessary to trim pad to fit.



12

### Install Operating Panel

To install the operating panel, lift the top into the interior track of the head. Swing the bottom of the panel in and place it into the interior track of the sill.

*NOTE: Be sure the wheels at the bottom of the panel are raised all the way up for easy installation.*



13

### Operating Panel Adjustment

Adjust the rollers using a standard Phillips head screwdriver. Adjust panel so it is centered from top to bottom and lock side of panel is parallel with the astragal. Check the operation of the operating panel to see if any further adjustments are necessary. Install hole covers.

*NOTE: The rollers are easier to adjust if panel is lifted or temporarily shimmed to take weight off the roller. This can be accomplished by sliding a screwdriver under the panel.*

*NOTE: The roller adjustment screws turn clockwise to raise and counter clockwise to lower panel.*



14

### Impact Bracket Installation

Install impact brackets on interlock side of operating panel. Insert brackets into notch in panel and align bracket with top edge of frame track. Pre drill two 1/8" holes through hole locations in brackets and install (2) #8 x 1/2" flat head screws.



See page 12 for handle set assembly and installation

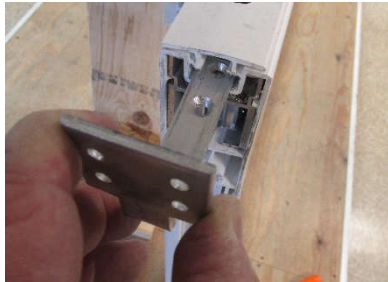


# FSL-3 Lite Door Assembly (Non-Impact)

1

## Attaching Fixed Panel Brackets

Slide the lower fixed panel brackets into the bottom of the fixed panels between the interlock and the panel. Do not fasten at this time.



*NOTE: Upper fixed panel bracket will already be attached to the panel.*

2

## Installing Fixed Panels

With the head installation screws out, from the exterior, insert the top of the fixed panel into the outer track of the head in the center of the frame. Swing the bottom of the panel in and place onto the sill track, one side of the fixed panel will rest on the sill spacer. Push panel over onto the sill spacer and into the side jamb. Repeat the process for the other fixed panel.

*NOTE: From outside looking in, fixed panel with interlock will go on Right side for Left hand door, Left side for Right hand door.*

*NOTE: The glazing bead around the perimeter of the glass will be toward the interior.*



3

## Fastening Fixed Panel Brackets

Tap the lower fixed panel bracket down until it contacts the sill. Install (8) #8 x 3/4" flat head screws into the pre drilled holes in the sill and head. Install (1) #8 x 1 1/4" flat head self tapping screw through hole in panel interlock into lower panel bracket. Repeat the process for the other fixed panel.

*NOTE: Head installation screws can be installed after fixed panel brackets are secured.*



4

## Fastening Fixed Panels

After the fixed panels are in place, drill 1/8" pilot holes into the weather-strip track on the jamb, 8" from each end and one in the center. The drill bit needs to be a minimum of 4" in length to prevent damage to the frame. Install (3) #8 x 1 1/4" flat head self tapping screws into each pilot hole.



5

### Installing the 3-Lite Astragal

Run a bead of caulk down the astragal between the sash pocket snap and the screen track. Position astragal with screen track facing exterior. Insert end of astragal into sill track and swing top into head track. Snap astragal in place then drill 5/32" holes into panel at each two-stepped screw hole location. Anchor astragal to panel using (3) #10 x 2 1/2" pan head screws. Install 3/8" vinyl hole caps over holes.

*Note: When drilling 5/32" pilot holes in panel, use care not to damage vinyl around two-stepped hole.*



6

### Install Threshold Ramp

Install the threshold ramp by hooking the edge of the threshold in the vinyl hook on the sill between the two fixed panels and hinging the threshold inward. Snap into place by tapping on top of threshold with a mallet.

*NOTE: Threshold ramp may need to be trimmed slightly to fit.*



7

### Install Exterior Head Track Cover

Install exterior head track cover between the astragal and the fixed panel by inserting cover in track with spring facing exterior. Use a mallet to snap into place.



8

### Install Interior Head and Sill Track Covers

Install interior head and sill track covers between astragal and jamb by inserting cover in track with spring facing interior. Use a mallet to snap into place.



9

### Install Sash Stops

Install the sash stops into the head and sill on the inside track.



10

### Install Interior Jamb Track Covers

Install interior jamb track covers by inserting covers with springs facing interior. Use a mallet to snap into place.



11

### Install Weather-Strip Pads

Install a weather-strip pad at the notch on each end of the fixed panel interlock. The pad has a center fin, when applying be sure the fin is in a vertical position. It may be necessary to trim pad to fit.



12

### Install Operating Panel

To install the operating panel, lift the top into the interior track of the head. Swing the bottom of the panel in and place it into the interior track of the sill.

*NOTE: Be sure the wheels at the bottom of the panel are raised all the way up for easy installation.*



13

### Operating Panel Adjustment

Adjust the rollers using a standard Phillips head screwdriver. Adjust panel so it is centered from top to bottom and lock side of panel is parallel with the astragal. Check the operation of the operating panel to see if any further adjustments are necessary. Install hole covers.

*NOTE: The rollers are easier to adjust if panel is lifted or temporarily shimmed to take weight off the roller. This can be accomplished by sliding a screwdriver under the panel.*

*NOTE: The roller adjustment screws turn clockwise to raise and counter clockwise to lower panel*



See page 12 for handle set assembly and installation

## Handle Set Assembly and Installation

*Note: The operating panel will come with the mortise lock already installed.*

1

Assemble exterior and interior handles according to handing of door. The key cylinder hole on the exterior handle will go towards the sill. The interior handle loop will go on the side with the notch.

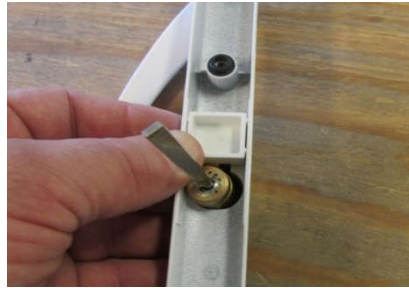
Insert the screw bushings onto the handles.



2

Insert the key cylinder in the exterior handle and secure with the hold down plug.

Insert the key cylinder tail in the slot in the mortise lock, then position handle in place.



3

Slide the thumb turn lever onto the key cylinder tail.

Install the two handle screws into the interior handle. Be sure to get these screw tight.



4

Check the operation by pushing in on the mortise lock release and turning the key and thumb turn lever to make sure they work freely.



*NOTE: The keeper will come installed on the astragal. The keeper may need adjusting to allow the mortise lock to operate properly.*