INSTALLATION INSTRUCTIONS
FOR 2-LITE PATIO DOOR
UNASSEMBLED

Tools & Materials You Will Need:

| • Measuring Tape | • Square |
| • Pencil | • Hammer or Mallet |
| • Shims | • Level |
| • Drill & Drill bits: \( \frac{3}{16} \), \( \frac{1}{4} \), \( \frac{1}{8} \), \( \frac{7}{16} \) | • Stiff Putty Knife |
| • Utility Knife | • Fiberglass Batt Insulation (for insulating between rough opening and patio door frame) |
| • High-Performance Premium Silicone Caulking | • (1) box #10-12 x \( \frac{1}{2} \)" Phillips Flathead self tapping screws (for mounting accessories) |
| • (1) Phillips and (1) Flathead screwdriver | |
| • (1) container PVC compatible approved sealant | |

REMEMBER: ALWAYS USE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

YOUR PACKAGE SHOULD CONTAIN THE FOLLOWING COMPONENTS:

• Sashes & Screen Complete, Patio Door Frame and Components Shipped Unassembled.

Homes built before 1978 may contain lead paint. All replacement installations must comply with the U.S. EPA’s Lead-Based Paint Renovation, Repair, and Painting Program (RRP Rule). Read more about the RRP Rule and lead-safe work practices, on the U.S. EPA’s website at: www.epa.gov/lead
Installation Pack Contents

The individual installation packs are labeled and numbered. Please refer to the chart below for the appropriate pack contents for the installation location:

<table>
<thead>
<tr>
<th>Pack Label No.</th>
<th>Install Location</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Frame Parts</td>
<td>Header</td>
<td>1</td>
<td>Head Assembly</td>
</tr>
<tr>
<td>Main Frame Parts</td>
<td>Sill</td>
<td>1</td>
<td>Sill Assembly</td>
</tr>
<tr>
<td>Main Frame Parts</td>
<td>Jams</td>
<td>2</td>
<td>Jamb Assembly</td>
</tr>
<tr>
<td>Accessory Parts</td>
<td>Jams</td>
<td>2</td>
<td>Jamb Covers</td>
</tr>
<tr>
<td>Accessory Parts</td>
<td>Handleset</td>
<td>1</td>
<td>Handleset Pack</td>
</tr>
<tr>
<td>Accessory Parts</td>
<td>Sill</td>
<td>1</td>
<td>Sill Dust Cover</td>
</tr>
<tr>
<td>1</td>
<td>Jams</td>
<td>20</td>
<td>#8 x 2&quot; Phillips Truss Head Stainless Steel Screws</td>
</tr>
<tr>
<td>2</td>
<td>Jams</td>
<td>6</td>
<td>⅜&quot; Flush Hole Plugs - Color Matched</td>
</tr>
<tr>
<td>2</td>
<td>Jams</td>
<td>6</td>
<td>#8 x 3&quot; Phillips Flathead Screws</td>
</tr>
<tr>
<td>2</td>
<td>Jams</td>
<td>1</td>
<td>#2 Phillips Square Combo Bit</td>
</tr>
<tr>
<td>3</td>
<td>Sash</td>
<td>3</td>
<td>Foam Plugs</td>
</tr>
<tr>
<td>3</td>
<td>Header</td>
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<td>Foam Plug (Insect Stop)</td>
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<td>3</td>
<td>Sash</td>
<td>4</td>
<td>#8 x ⅜&quot; Phillips Flathead Screws</td>
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<tr>
<td>3</td>
<td>Sash</td>
<td>4</td>
<td>Screw Caps</td>
</tr>
<tr>
<td>4</td>
<td>Header</td>
<td>1</td>
<td>Head Weatherstrip Block</td>
</tr>
<tr>
<td>4</td>
<td>Header</td>
<td>2</td>
<td>#8 x 1 ¼&quot; Phillips Panhead Screws</td>
</tr>
<tr>
<td>5</td>
<td>Header</td>
<td>1</td>
<td>Sash Stopper</td>
</tr>
<tr>
<td>5</td>
<td>Header</td>
<td>2</td>
<td>#8 x 1 ¼&quot; Phillips Panhead Screws</td>
</tr>
<tr>
<td>6</td>
<td>Active Sash</td>
<td>1</td>
<td>Secondary Lock - Color Matched</td>
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<tr>
<td>6</td>
<td>Active Sash</td>
<td>4</td>
<td>#10 x ⅜&quot; Phillips Square Combo Screws -color matched</td>
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<tr>
<td>10</td>
<td>Screen</td>
<td>2</td>
<td>Screen Roller Brackets</td>
</tr>
<tr>
<td>10</td>
<td>Screen</td>
<td>2</td>
<td>#6-32 x ⅝&quot; Phillips Flathead Screws for Screen Roller Brackets</td>
</tr>
</tbody>
</table>

BEFORE YOU BEGIN

- Inspect your package for any visible damages to the product.
- Double check your paperwork with the label on the product(s) and make sure all information matches up to what you have on your paperwork.
- If you have ordered extra optional items, make sure they are in the package before driving to the installation site.
- As always, practice SAFETY and ensure your installation site is a safe workplace.
**FRAME ASSEMBLY**

**Important!** The patio unit frame will have some preassembly and preparations from the factory that allow the proper handing of the patio unit as ordered. *Changing the handing in the installation field will require replacement parts from the factory.*

**Step 1** - Make sure the factory mounted gaskets and gasket for the sill adapter place are in place (see illustration).

**Step 2** - Fix the jambs at the head and sill with (5) #8 x 2" Phillips truss head screws in each corner starting from the outside to the inside (see install pack labeled #1).

5839 Interior cover mounted inside of patio door with 2 vertical side pieces and 1 horizontal header piece

**Step 3** - Make sure the factory mounted gaskets for the jambs are well compressed.

**Step 4** - Make sure interior groove covers are in place on the 2 vertical sides and 1 header (see illustration).
2 MEASURE & PREPARE OPENING

Read these instructions carefully before starting installation. Failure to follow installation instructions voids all existing and implied warranties.

![Important! Sill must be level!]

- **Step 1**: Make sure rough opening is clean, clear of any debris, and level.
  
  A level sill is critical! If sill is not flat, straight and level, it must be shimmed for proper operation.

- **Step 2**: Make sure the new door will fit into the opening by allowing a \( \frac{1}{2} \)" gap all around. The rough opening must measure no more than the door size + \( \frac{5}{8} \)".
  
  The performance of this door will be affected if the opening is too small or too large.

  Shims must be used at each installation screw where gap is more than \( \frac{1}{16} \)".

- **Step 3**: Install two generous beads (\( \frac{3}{8} \)"") of premium caulking compound along entire length of sill, making sure it is a STRAIGHT LINE as illustrated.
3 OPTIONAL METAL ANCHOR INSTALLATION

If you ordered your patio door for the metal anchor block application, please follow these steps listed below.

If you ordered your patio door for a standard installation using #8 x 3" installation screws, proceed to Procedure 4.

Step 1- Install (12) metal anchors onto patio door frame at 8" from corners from top down with a maximum distance between each anchor not exceeding 27 1⁄2" (see illustration). If the distance is over 27 1⁄2", add an additional anchor.

There are 12 anchors in each kit.

Step 2- Install anchors using the (12) #6 x 3⁄4" Phillips screws. Install one # 6 x 3⁄4" screw at each location into the first hole of the metal anchor block (see illustration above).

Step 3- If your opening wall depth is over 6", insert the frame with the metal anchors mounted into the opening. The metal anchor blocks will be mounted inside the jamb, parallel to the patio door frame.

Install the metal anchor blocks into the jamb opening using #8 x 3" installation screws into the 1st hole (see above illustration).

Step 4- If your wall depth is smaller than 6" frame depth, insert the frame with the metal anchors mounted into the opening. Tap the metal anchor blocks so that the blocks will bend over onto the face of the interior wall using a hammer or mallot.

Install the metal anchor blocks using the #8 x 3" installation screws onto the 1st hole of the metal anchor block (see illustration).
**4 INSERTING PATIO FRAME INTO OPENING**

**STOP**

If you ordered a patio door unit with nail fin, brickmold or additional accessories, please go to page 15.

**Step 1** - Sit the patio frame into the opening, SILL FIRST, making sure the caulking compound makes a perfect seal between the door sill and the floor.

**5 SHIMMING & INSTALLING PATIO DOOR FRAME**

**Note:** It is very important to make sure door is not overshimmed. Too many shims will cause the door unit to bend and jeopardize operational performance of the door.

**Step 1** - Square the door into the rough opening by leaving a $\frac{1}{8}'' - \frac{1}{4}''$ space to allow for insulation and expansion of wood.

Place the shims at 12'' intervals, 4-6'' from corners.

**Important!** Install the header shim after panels have been installed and after Procedure 11.

*Continued on Next Page*
Step 2- Pre-drill a hole of \( \frac{3}{8} \)" diameter through the first wall of the vinyl jamb and install #8 x 3" Phillips Panhead screws (see install pack labeled #2), 4 at each side and 4 in header.

Cover with hole plugs provided (see install pack labeled #2).

Follow with jamb covers (as illustrated).

Step 3- Measure from corner to corner and square the frame (upper left to lower right and upper right to lower left). Shims must be used if there is space between door jamb and rough opening more than \( \frac{1}{4} \)".

6 INSERTING INSULATION

Step 1- Insulate gaps using a loose, batt insulation and being careful not to overstuff the insulation into the gaps. Doing so will cause the patio unit to become out of square.

Step 2- Trim all shims flush with the patio door unit frame. Caulk and finish the exterior of the door to ensure water tightness between rough opening and door frame.
## INSERTING FIXED PANEL

**Step 1**
From the inside or outside, insert the top of fixed panel into the outside track of the head of the active sash, bypassing the anchor block, making sure the interlock weatherstrip is facing inward.

Slide the fixed sash across so that it slides right over the anchor blocks.

Make sure the weepholes of the glazing bead are at the bottom of the exterior of the door.

**Step 2**
Insert the bottom of the panel onto the sill adapter and slide the panel towards the jamb.

**Step 3**
Insert the foam plug (*see install pack labeled #3*) at the base of the side stile and slide the fixed panel fully against the jamb. Check for squareness.

**Step 4**
Insert the foam plugs (*see install pack labeled #3*) at the base of the meeting stile of the fixed panel.

**Step 5**
Install (4) #8 x 7⁄8" Phillips panhead screws (*see install pack labeled #3*) into the holes provided at the top and bottom of the horizontal panel rails.

Cover each hole with hole plug (*see install pack labeled #3*).

**Step 6**
Slide caps at each end of interlocks to cover screws as illustrated.
**Step 1**- From inside the home, insert the top of the active sash into the head track, making sure the weatherstripping is facing outward as illustrated.

**Step 2**- Set active sash onto the rolling rail. If necessary, adjust the height and squareness of the active panel sash with adjustment screw by turning clockwise to raise the sash and counterclockwise to lower the sash as illustrated.

**Step 3**- Handleset stile must be plumb and penetrate the jamb $\frac{5}{16}" - \frac{3}{8}"$. 
9 INSERTING HEAD WEATHERSTRIP & INSECT STOP

Step 1- Move the active panel to full open position and slide the head weatherstripping (see install pack labeled #4) into the head cavity at the junction of meeting stiles as illustrated.

Step 2- Attach the head weatherstripping with (2) #8 x 1 1/4" Phillips flathead screws (see install pack labeled #4).

Note: Make sure weatherstripping block sits aligned directly above the interlock and is flush with insect stop.

Step 3- From the outside of the home, insert the insect stop (see install pack labeled #3) above the meeting stile of the fixed panel as illustrated.

10 SASH STOPPER (BUMPER) INSTALLATION

Step 1- Review chart illustrated showing dimension needed.

Step 2- Locate sash stopper (see install pack labeled #5) in header using the dimensioned location on the chart.

Step 3- On the fixed panel side, place the sash stopper at the indicated location. Rest the sash stopper against the vertical wall in order to prevent interference with the fixed panel (see illustration).

Step 4- Fasten the sash stopper with the (2) #8 x 1 1/4" Phillips Panhead wood screws (see install pack labeled #5).

Important Note: Avoid screwing the attachment screws too deeply into the part.
11  MULTI-POINT HANDLESET INSTALLATION

Step 1- From the inside, install the inside handle (see accessory parts bag) making sure the actuator bar engages and is inserted into the slot of the lock.

Step 2- Position exterior handleset and secure from inside of home with (2) #10 x 2 1/2" Philips oval head machine screws.

Step 3- Make sure the flathead adjustment screws on the mortise lockbody are adjusted tightly so that they will spread open the lock and engage into the top and bottom of the multi-point keeper.

Step 4- Position latch keeper into the jamb track and attach with (4) #10 x 1 1/4" Phillips Flathead Screws.

12  INSTALL ROLLER BRACKETS FOR SCREEN

Step 1- Locate the roller brackets (one each for the left and right sides determined from outside looking in). Brackets will have hand designation molded into part as shown in illustration.

Step 2- Insert the LEFT hand roller bracket into the LEFT end of the inner track. Follow same procedure for the RIGHT hand roller bracket.
**Step 1** - Position the top of the screen inwards and into top track assembly between roller brackets (see illustration).

**Step 2** - Lift screen and position bottom of screen over the sill glide track (see illustration).

**Step 3** - Move brackets to each side of screen. Insert the bottom tab portion of the roller bracket into the groove (see illustration).

**Step 4** - Attach the roller brackets (one at left and right sides) at the top portion of the screen using a #2 Phillips Head Screwdriver and the #6-32 x 7/8" Phillips Flathead screws. **Important!** Do not use excessive torque on the bracket screws.

**NOTE:** If it is difficult to attach the screen to the brackets, refer to Procedure 14, “Adjustment of Screen” and raise the inside track.
**ADJUSTMENT & OPERATION OF SCREEN**

*Important! DO NOT USE* a power drill to make adjustments - doing so will cause excessive torquing of the adjustment screws. Only use a #2 Phillips Head Screwdriver.

Adjustments to the screen can be made by inserting a #2 Phillips Head screwdriver into each adjustment screw. **Note:** There are 3-6 adjustment screws evenly spaced in the inside track (depending on width of unit). **DO NOT REMOVE** the adjustment screws.

Adjust the left and right sides of the screen until the sides are parallel to the jambs.

- Each complete turn of the screw will raise or lower the track by $\frac{1}{32}$".
- 1. Turn adjustment screw clockwise to RAISE screen from threshold.
- 2. Turn adjustment screw counter-clockwise to LOWER screen onto threshold.

**ADJUSTMENT OF SCREEN LATCH KEEPER**

**Note:** The screen latch and keeper will ship factory mounted.

**Step 1-** Check for proper operation. The screen latch should hook underneath the latch keeper with the keeper screws at the top (see illustration).

- The latch should always “unlatch” while pushing downward on the paddle.

Adjust keeper up or down as necessary.
Step 1- Locate the roller brackets (one at left and right sides) at the top portion of the screen and using a #2 Phillips Head Screwdriver remove the roller bracket.

Step 2- Pull bracket outward from screen rail.

Step 3- Push the screen up and lift out clearing the bottom of the screen from the sill glide track. The roller bracket and wheel housing can remain on the inside track for ease of re-installing the screen.
SECONDARY/VENT LOCK INSTALLATION

Step 1- Make sure the active panel is in a closed and locked position.

**Important!** Before drilling the secondary lock onto the active panel, visually locate the position so that the secondary lock will sit directly above the stainless steel keeper and will engage into the first hole (closest to the jamb) on the stainless steel keeper.

Step 2- Locate the secondary lock (see install bag labeled #6) onto the horizontal rail on the active panel, making sure height is at a min. of .9375” (15/16”).

Step 3- Once height has been established correctly, attach using the (4) #10 x 5/8” Phillips Flathead screws (see install bag labeled #6).
**NAIL FIN INSTALLATION**

**Step 1** - Measure from corner to corner on the frame to ensure the frame is square (upper left to lower right and upper right to lower left). Add shims if necessary, making sure to leave a $\frac{1}{8}$" to $\frac{1}{4}$" space between the frame and the rough opening.

**Step 2** - Begin securing the frame in rough opening by placing a 1 1/4" roofing nail through every other pre-punched hole on the nailing fin. Make adjustments in nail size for different sheathing thickness or applications.

**Step 3** - Now that the frame is secured, proceed to Procedures 4-17 (pages 5-14) in this installation manual.

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**Note:** When the required DP rating exceeds 25, it is recommended to provide additional anchorage in the jambs.

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**BRICKMOLD INSTALLATION**

**Step 1** - Apply a line of sealant along the channel that will snap into the brickmold or brickmold accessory groove.

**Step 2** - Snap brickmold or brickmold accessory into channel of patio door frame.