Congratulations on your purchase of the 3½" Louver Template Set! These instructions will guide you through the process of building a Plantation Shutter. Familiarity with the instructions will make the process easier to understand and more enjoyable. Please read the instructions all the way through before beginning construction on your shutters.
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### PARTS LIST - 3½" LOUVER TEMPLATE SET

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>1 Stile Jig</td>
<td>1</td>
</tr>
<tr>
<td>2 Louver Jig</td>
<td>1</td>
</tr>
<tr>
<td>3 Side Stop</td>
<td>2</td>
</tr>
<tr>
<td>4 Side Stop Knobs</td>
<td>2</td>
</tr>
<tr>
<td>5 1/4&quot; Shutter Drill Bit</td>
<td>1</td>
</tr>
<tr>
<td>6 3/32&quot; Shutter Drill Bit</td>
<td>1</td>
</tr>
<tr>
<td>7 9/64&quot; Shutter Drill bit</td>
<td>1</td>
</tr>
<tr>
<td>8 Indexing Pins</td>
<td>2</td>
</tr>
</tbody>
</table>
**Mounting Considerations**

**Inside mount no frame**
- Window opening should be nearly square
- Solid wood jamb needed
- Butt hinge application

<table>
<thead>
<tr>
<th>Louver Style</th>
<th>Min. Depth Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movable</td>
<td>2 1/8&quot;</td>
</tr>
<tr>
<td>Fixed</td>
<td>1 1/2&quot;</td>
</tr>
</tbody>
</table>

Fig. 1

**Inside mount hang strip**
- Mounting for window openings that are not square
- Hang strip may need to be mounted towards the room
- Wrap around hinge application

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</tr>
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<td>Fixed</td>
<td>1 1/6&quot;</td>
</tr>
</tbody>
</table>

Fig. 2

**Outside mount hang strip**
- Recommended for drywall openings
- Mounted flush with hang strip
- Butt hinge application

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<tbody>
<tr>
<td>Movable</td>
<td>1 1/6&quot;</td>
</tr>
<tr>
<td>Fixed</td>
<td>0&quot;</td>
</tr>
</tbody>
</table>

Fig. 3
Shutter Mounting and Measuring

1. Determine mounting applications and prepare windows. Fig 1, 2 and 3.

2. Once window prep has been completed, determine the number of shutter panels desired per window.

3. Measure for panel height. For inside mount panel height measure the total window opening and subtract 1/4". For outside window mount, measure the total window opening and add the desired top and bottom overlap.

4. Measure for panel width by dividing the total window opening by the number of shutter panels and then subtract the appropriate gaps. **Note:** Leave 1/16" gaps where hinges are mounted and 1/8" gaps between panels.

5. Take these measurements and plug them into the Shutter Design Wizard at rockler.com to create your Bill of Materials and Dimensioned Plans specific to your shutters.

Shutter Design Options

1. A Middle Rail is recommended for shutters over 48" in height. Remove one Louver from the shutter and replace with a 3" wide rail with 5/16" rabbets on both sides.

2. Consider rabbeted stiles between panels to block light transmission. Add 3/8" width to one stile to create the overlap. Fig. 4.
Drilling Stiles
1. Place shutter frame rails and stiles face side down on work surface.
2. Label back side of stiles and rails.
3. Measure the width of the top rail and transfer that measurement to the top end of each stile. Measure the width of the bottom rail and transfer that measurement to the bottom end of each stile. The first hole dimension is also provided in the plan.
4. Clamp stiles to Stile Jig (1), aligning the top rail mark with the etched line that says “Align with Top Rail” on jig template. Note: Be sure that the stile faces are toward the Jig fence. See Stile Jig Drilling Hole Reference.
5. Using the 1/4” Shutter Drill Bit (5), drill the single hole pattern along stiles. Fig. 5.
6. Move stiles along jig to complete desired series of holes. Use index pins to keep stock from shifting.

Drilling Front Control Arms
1. Measuring 1" from the top of the control arm, mark your first hole on the control arm. Fig. 6.
2. Clamp the control arm to the Stile Jig (1) aligning the mark for the first hole with the first control arm hole found on the Stile Jig (1). See Jig Drilling Hole Reference.
3. Drill control arm holes using the 3/32” Shutter Drill Bit (6). Bit is pre-set to 3/8” depth. Fig. 6.

Drilling Louvers
1. Center your louver stock under hole “A” on the Louver Jig (2). Adjust the side stops (3) on the Louver Jig (2) for a tight fit. Add additional clamps if needed. See Louver Jig Drilling Hole Reference.
2. Using the 9/64" Shutter Drill Bit (7) drill a single hole pattern in the end of the louver. **Fig. 7.**

4. Flip the louver end for end and repeat drilling process, again using hole “A”.

5. Repeat for all louvers.

**Drilling Louvers for Control Arm**

1. Find and mark the center from end to end of each louver and transfer to the front edge.

2. Align and clamp your louver stock to the Louver Jig (2) so your center mark lines up with hole “D”. See **Louver Jig Drilling Hole Reference.**

3. Drill control arm holes using the 3/32" Shutter Drill Bit (6). Bit is pre-set to 3/8" depth. **Fig. 8.**

4. Repeat for all louvers.

**Shutter and Control Arm Assembly**

1. Depending on selected finish (paint, stain and/or clearcoat), prefinish components before assembly.

2. Attach pins to louvers. Use standard shutter pins (46388, sold separately)

3. Insert all louver pins into holes on the first stile. Make sure control arm holes are facing the front of the shutter.

4. Glue and install the top rail to the right stile and lightly hold them together at the end with a clamp. Do not get glue on the pins and louvers.

5. Working from one end toward the other, align the louvers and second rail with the left stile.

6. When all the parts are together, clamp the frame tight and check for square.

7. Using a needle nose pliers, attach shutter control arm fasteners (47678, sold separately) to the control arm by inserting the open ends into the control arm hole. **Note alignment in Fig. 9.**

8. Rotate louvers so the control arm holes on each louver edge are facing up. It may be necessary to add temporary support for the shutter frame.

9. Place the control arm across louvers so fasteners are close to edge holes.

10. Starting at the top louver, and using a needle nose pliers, hook the second fastener through the opposing fastener and insert into the louver edge hole. Fasteners should be parallel to the louver. **Fig. 9 Inset.**

11. Continue until your louvers are completely secured to the shutter control arm using the control arm fasteners.
Stile Jig Drilling Hole Reference

**Drilling Stiles**

1. Place shutter frame rails and stiles face side down on work surface.
2. Label back side of stiles and rails.
3. Measure the width of the top rail and transfer that measurement to the top end of each stile. Measure the width of the bottom rail and transfer that measurement to the bottom end of each stile. The first hole dimension is also provided in the plan.
4. Clamp stiles to Stile Jig (1), aligning the top rail mark with the etched line that says “Align with Top Rail” on jig template.
   **Note:** Be sure that the stile faces are toward the Jig fence. See Stile Jig Drilling Hole Reference.
5. Using the 1/4" Shutter Drill Bit (5), drill the single hole pattern along stiles. **Fig. 10.**
6. Move stiles along jig to complete desired series of holes. Use index pins to keep stock from shifting.

**Drilling Louvers**

1. Center your louver stock under hole “A” on the Louver Jig (2). Adjust the side stops (3) on the Louver Jig (2) for a tight fit. Add additional clamps if needed. See Louver Jig Drilling Hole Reference.
2. Using the 9/64" Shutter Drill Bit (7) drill a single hole pattern in the end of the louver. **Fig. 11.**
3. Flip the louver end for end and repeat drilling process, again using hole “A”.
4. Repeat for all louvers.

**Drilling Louvers for Control Arm**

The following steps require the Hidden Control Arm Jig (45143, sold separately).
1. Align rabbet with jig template hole holding louver stock edge against stop pin.

2. Drill pilot hole with 1.2mm bit included with the Hidden Control Arm (45143, sold separately). **Fig. 12.**

3. Repeat for all louvers.

**Shutter and Control Arm Assembly**

1. Depending on selected finish (paint, stain and/or clearcoat), prefinish components before assembly.

2. Attach pins to louvers. Use standard shutter pins (46388, sold separately)

3. Insert all louver pins into holes on the first stile. Make sure all of the rabbets are aligned on the back side of the stile. **Note:** Hidden control arms are typically mounted on the hinge side of the shutter panel.

4. Glue and install the top rail to the right stile and lightly hold them together at the end with a clamp. Do not get glue on the pins and louvers.

5. Working from one end toward the other, align the louvers and second rail with the left stile.

6. When all the parts are together, clamp the frame tight and check for square.

7. Cut the control arm (44880, sold separately) to length using a hacksaw. File any rough edges.

8. Stabilize the shutter panel on its side and move louvers into position for attaching the hidden control arm.

9. Tack first and last nails (45400, sold separately) to louvers and then complete all louvers. **Fig. 13.**
Drilling Stiles
1. Place shutter frame rails and stiles face side down on work surface.
2. Label back side of stiles and rails.
3. Measure the width of the top rail and transfer that measurement to the top end of each stile. Measure the width of the bottom rail and transfer that measurement to the bottom end of each stile.
4. Clamp stiles to Stile Jig (1), aligning the top rail mark with the etched line that says “Align with Top Rail” on jig template.
   **Note:** Be sure that the stile faces are toward the Jig fence. See Stile Jig Drilling Hole Reference.
5. Using the 1/4" shutter drilling bit (5), drill the double hole pattern along stiles. **Fig. 14.**
6. Move stiles along jig to complete desired series of holes. Use index pins to keep stock from shifting.

Drilling Louvers
1. Center your louver stock on the “A” hole of Louver Jig (2). Adjust the slide stops (3) on the Louver Jig (2) for a tight fit. Add additional clamps if needed. See Louver Jig Drilling Hole Reference.
2. Using the 9/64" Shutter Drill Bit (7) drill a double hole pattern (“B” holes) in the end of the louver. **Fig. 15.**
3. Flip the louver end for end and repeat drilling process, again using the “B” holes.
Shutter Assembly

1. Depending on selected finish (paint, stain and/or clearcoat), prefinish components before assembly.

2. Attach pins to louvers. Use "no shoulder" shutter pins (46943, sold separately)

3. Insert all louver pins into holes on the first stile.

4. Glue and install the top rail to the right stile and lightly hold them together at the end with a clamp. Do not get glue on the pins and louvers.

5. Working from one end toward the other, align the louvers and second rail with the left stile.

6. When all the parts are together, clamp the frame tight and check for square.

5. Repeat for all louvers.