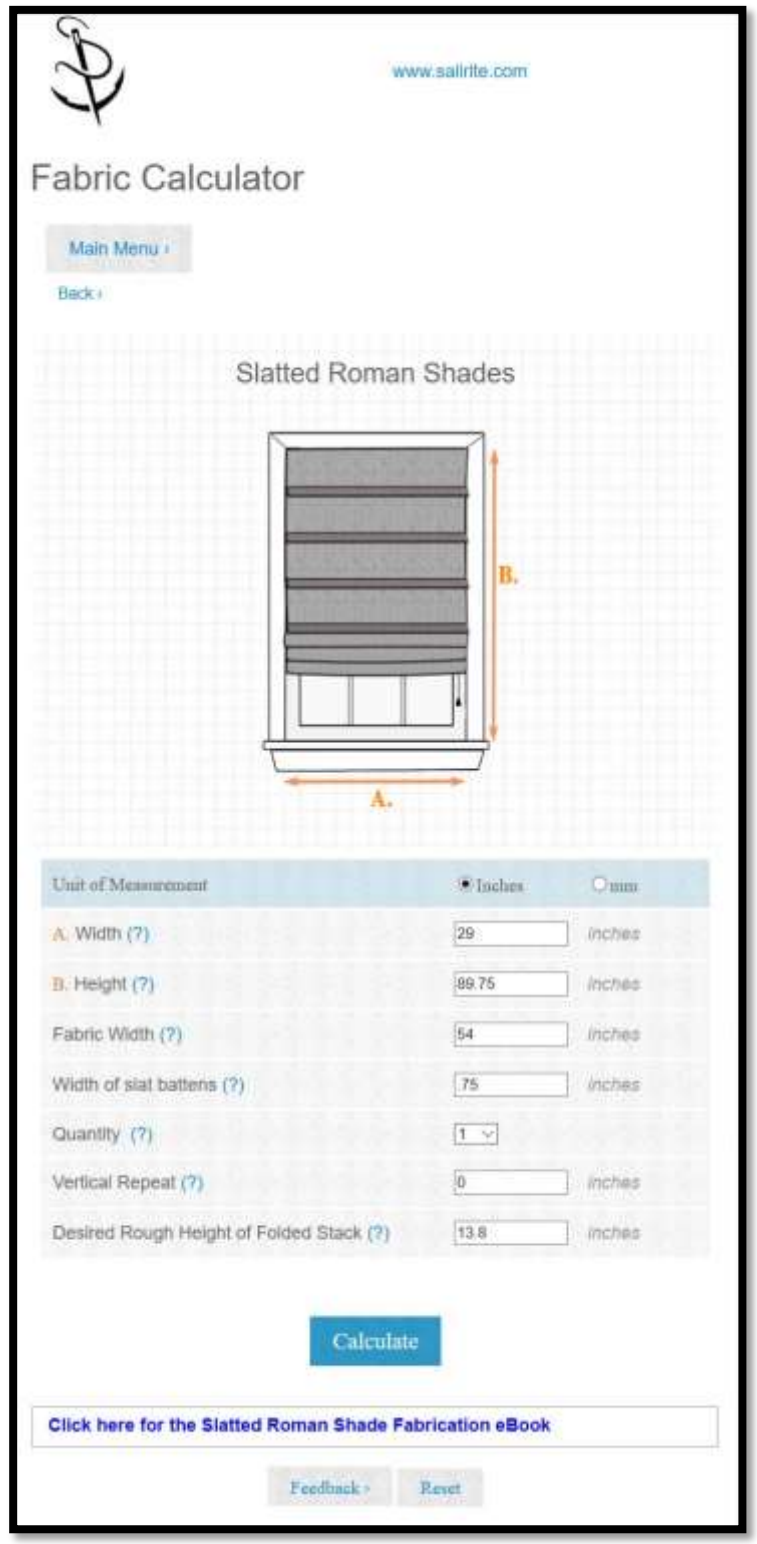
Building a Slatted Roman Shade

This shade will be lined although the lining is optional. The instructions below indicate which steps to skip if there is no lining. The shade that we build will make use of simple cord "lift lines" with rings. There will be slats or battens on each segment in casings sewn right into the shade itself. The left and right edges of the shade will be finished with a double folded hem. We will display dimensions used for the shade built in the course of the Sailrite Slatted Roman Shade video. There follows a blank space into which the relevant figures for the particular shade in question can be entered.

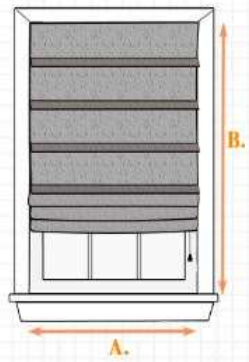


The first order of business in a project like this is to make good use of the fabric calculator at www.fabric-calculator.com/SlattedRoman.aspx. Enter width (29 inches in our case _____) and height (89.75 inches_____) and fabric width (54 inches_____). We will use Covington Woven Ticking Blue (Item 104904_____). It has no vertical repeat. If there were a vertical repeat, the calculator would indicate how far multiple shades should be spaced vertically so the pattern on each would be similarly located. The horizontal repeat here is very small but even a larger one would not matter since each shade will be centered with the calculator's guidance.

The "desired rough height of folded stack" input textbox defaults to 13.8 inches given the length of this shade (the default seed is linked to this input – it will yield a shade with 7 segments which will normally look very good but the default can be overridden if desired to increase or decrease the number of segments). Hit "calculate". The screen below can be scrolled into view. If this screen is scrolled up the calculator results (on the left below) and the entire shade rendition will be viewable (the rendition is displayed below on the right).

If the unit of measurement is changed at any time the dimensions shown will all be recalculated to reflect the change but rounding error will be introduced each time the operation is performed so use this option sparingly.

Slatted Roman Shades



Unit of Measurement	◉ Inches	○ mm
A. Width (?)	29	inches
B. Height (?)	89.75	inches
Fabric Width (?)	54	inches
Width of slat battens (?)	.75	inches
Quantity (?)	1	
Vertical Repeat (?)	0	inches
Desired Rough Height of Folded Stack (?)	13.8	inches

Calculate

Click here for the Slatted Roman Shade Fabrication eBook

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Cut Sizes:

114.75 inches of decorative fabric or 3.19 yards.
one panel width 114.75 inches long for each shade.
Decorative fabric cut size per shade = 32 x 114.75 inches.
Lining fabric (optional) cut size per shade = 28 x 107.75 inches.

Calculated Measurements:

Number of segments = 7
Finishing allowance at bottom = 7 inches.
First fold line up from finished bottom edge (dotted line shown below) = 9.71 inches.
The next (5) fold lines each go up 15.64 inches from the last.
From the last fold line to top finished edge = 16.85 inches (may need modified for possible shrinkage).
Finishing allowance at top = 3 inches.
Solid sew lines are 1.125 inches above and below each fold line (shown below).

Lift lines = 2
Lift line spacing = 27 inches.
Total length of lift lines = 24 feet.

List of Materials: (click on blue text to research)

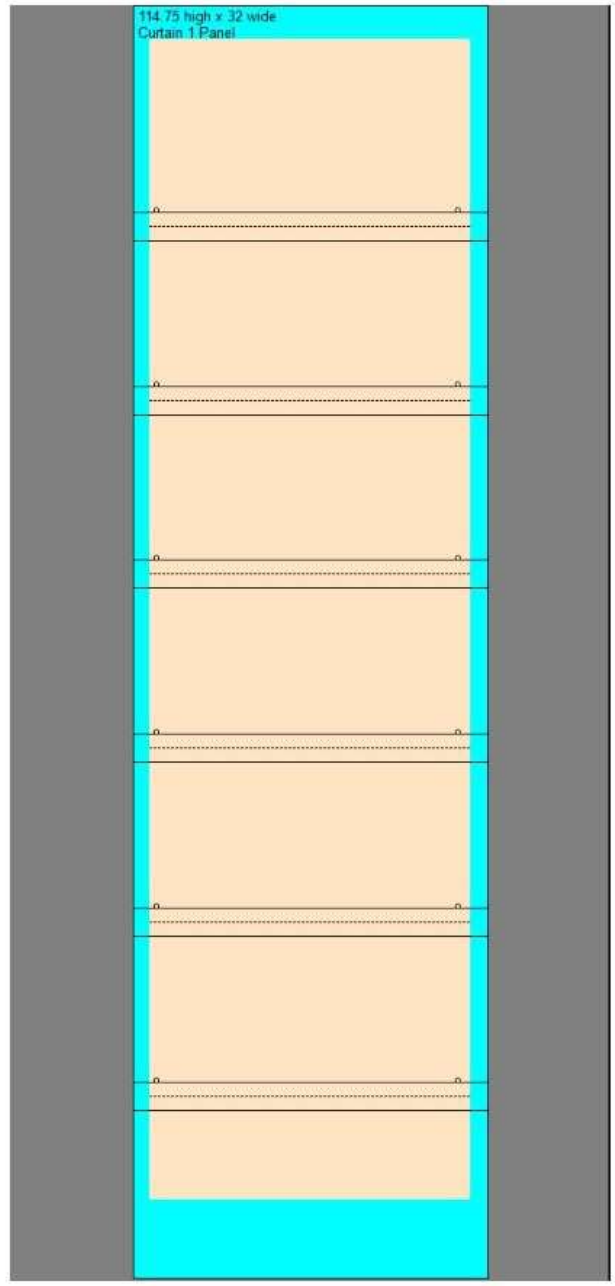
Decorative Fabric from Sailrite 4 yards.
Optional Drapery Lining Fabric from Sailrite #120164 (white) / #120185 (ivory) / #120280 (white Blackout) / #120282 (Ivory Blackout) 3 Yards.
Thread from Sailrite
Sew on Rings #104469-NKL or #104469-BRS 12
Nylon White Hook #467100 2.42 feet
Nylon White Loop #471100 2.42 feet
Screw Eyes #120034 2
Cord Lock #104468 1
Leechline 5/64" #21207 24 feet
Cord Adjuster Orb #120065 2 each
Plastic Lift Cord Condenser #104470 1
Wooden Blind Cord Tassel 1 each
Bottom Rod #104989 1 at 28.5 inches
Wooden Slats (from hardware store) 6 -- each one 28.5 inches
Mounting screws and headboard (from hardware store) - Typically 3/4" x 1" x width of shade

Cut Panel Rendering: Save As (PDF)

The Facing Fabric is mapped below:

Each shade is centered on a single width of fabric.
The Centering Offset is 11 inches.
Scrap is dark grey.
Hem and finishing allowances are turquoise.
The curtain itself is ivory.

FABRIC/ASSEMBLY WIDTH ‹—›



NOTE: Our goal is to make the Fabric Calculator as accurate as possible, but please **double-check all results thoroughly**. Sailrite will not be held responsible for any miscalculations, cut fabric, or purchased fabric as a result of this software.

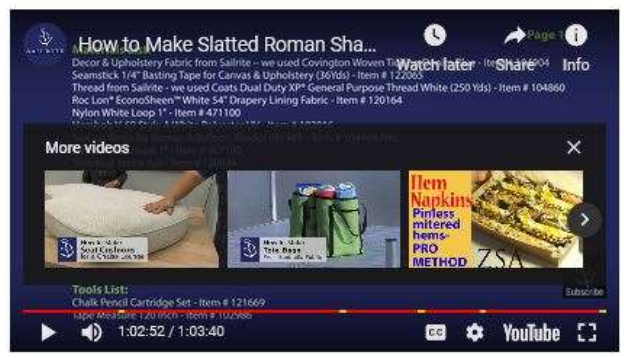


Figure 1: The Fabric Calculator Output

Several things should be noted. The calculator allows 1.5 inches (38 mm) for hems along both vertical shade edges. Wider or narrower hems are not “wrong”.

Second, the shade is centered over the fabric panel (or panels in the case of wide shades). Centering keeps any horizontal pattern repeats in the same position from shade to shade. The “centering margin” here is 11 inches or 279.4 mm (in the box at the top of the rendition). If the fabric does not have a finished selvedge edge (some fabrics include extra fabric beyond the nominal published width), trim or mark it to establish that width before taking the centering measurement. If two or more panels are joined lengthwise to create sufficient width, align them carefully so the pattern (if any) matches along the vertical seam.

Third, the “high” and “wide” dimensions on the rendering include edge allowance as well as head and foot allowance. They are, in other words, cut dimensions. These edge additions are indicated with a light shade of b1u e on the rendition.

Fourth, slats are shown on each segment except the bottom one. Slatted shades require battens. Sailrite’s sail battens work fine but they are very durable and, therefore, more costly than necessary. There is nothing wrong with inexpensive wood battens ripped to about a 1/8 inch thickness (about 3mm) from a piece of lumber. The 1 inch (25 mm) default width can be changed if desired – indeed, our example makes use of .75 inch (19 mm) slats. The calculated yardage required will be increased accommodate deeper pockets or reduced if the width is decreased.

Fifth, lining fabric is included in the list of materials but it is optional. We will be using a lining with this shade.

STEP BY STEP FOR SLATTED SHADES:

Step 1 — Create the Shade Panels

Cut the 114.75 (2914.4 mm) _____ by 32 (813.2 mm) _____ inch panel of decorative fabric that will make this shade. If the fabric has a horizontal pattern use the centering offset to centralize that pattern from side to side. If not or if the pattern is very small, as in the case of our example, the primary shade panel can be cut from one side to maximize the width of scrap. If there were multiple shades and if the fabric were to have a vertical pattern, each panel would be offset vertically as would be indicated in the rendition. This would start the pattern at the same point in each shade.

Figure 2: A scissors can be used – all edges will be finished.

If there is to be a lining, cut a piece of lining 107 (2736.4 mm) _____ by 28 (711.6) _____ inches.

Step 2 — Cut the Facing Strip

From this cut panel remove a strip of fabric along the bottom. The resulting "facing strip" will be used to create a double thickness finished panel at the bottom of the shade. All shades with a "rough height of folded stack" greater than 5 inches (127 mm) will have 6.5 inches (165.1 mm) of their lower length cut away. Those with "rough height of folded stack" less than 5 inches will have just 2.5 inches (63.5 mm) cut away. The reason for this is the reduced height of segments in the latter case – there is just not room for the bigger finished panel portion. In our case, the rough height figure is 13.8 so there is lots of room for a facing strip 6.5 _____ inches (165.1 mm) deep. Make sure that this cut is made perpendicular to the two edges and perfectly straight. We fold the bottom up and over onto itself keeping the two edges flush – this insures a right angle facing strip cut.

Figure 3: Cutting the facing strip

Step 3 — Secure the Lining (skip this step if there is no lining)

Now attach the lining. Spread the decorative fabric face up on the work surface. Lay the lining right side down over it.

Figure 5: Basting the Lining on the First Edge

Baste the lining in place with ¼ inch Seamstick first along one edge with the two layers and the bottom flush. Then smooth the fabric layers together over to the other edge until they are flush and baste. Be careful not to skew the lining as it is attached.

Figure 4: Basting the Second Edge

Both edges should be sewn carefully with stitches 1/2 inch (8.5 mm) inside the flush edges. The decorative fabric will be three inches wider than the lining – there will be folds on its surface.

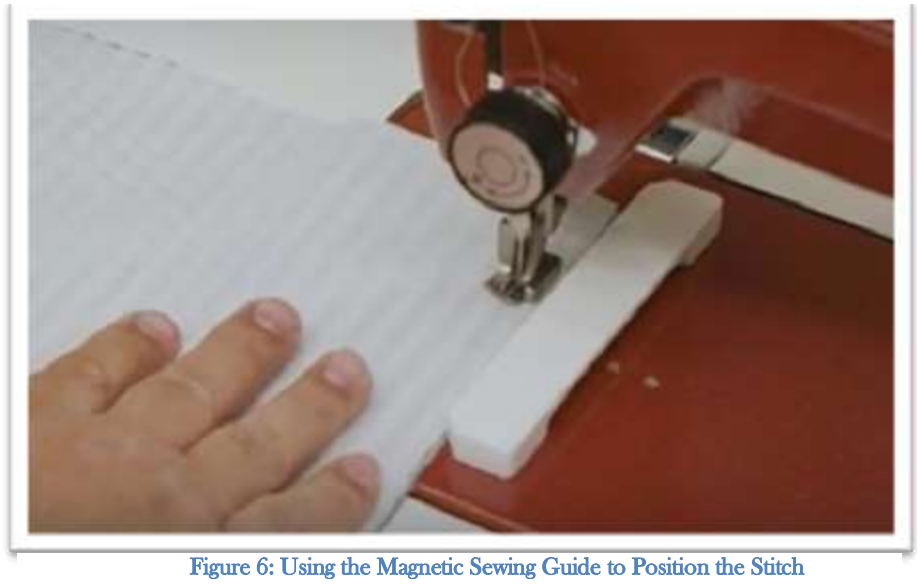
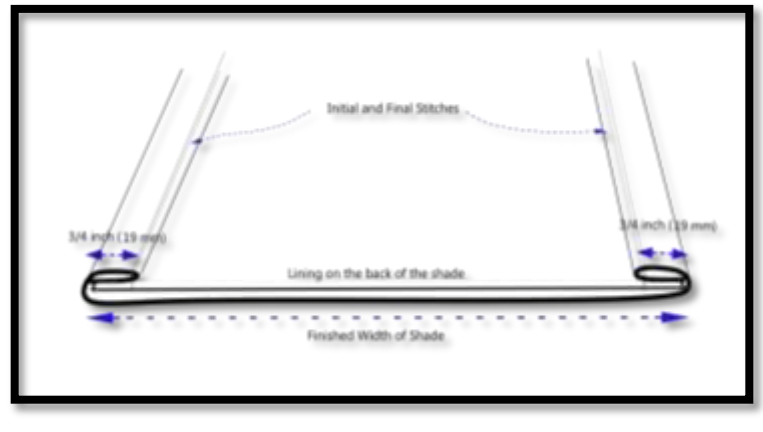


Figure 6: Using the Magnetic Sewing Guide to Position the Stitch

Then turn the shade assembly right side out. Center the lining over the decorative fabric. Press the excess decorative fabric beyond the lining over onto the back of the shade (the lining will not be folded) along both edges of the shade panel over onto the back side of the shade. Press everything in place making sure that the width of the shade is accurate. The ¾ inch dimension in the drawing here is approximate depending on the bulk of the decorative fabric used.



Step 4 — Fold the Edges if there is No Lining (Skip if there is a Lining)

If there is no lining, create a doubled hem along both sides of the shade. Make the first fold 1/2 inch (12.7 mm) deep and then fold a second time to a 1 inch (25.4 mm) depth right on top of the first fold. Each side of the shade will be reduced in width by 1.5 inches as a result of these folds. Measure the shade width after folding to make sure that it matches the desired finished width (in our case 29 inches). The two folds can be pressed in place or Seamstick (transfer tape) can be used to hold them down.

Step 5 — Sew the Edges

Whether the hems are created with or without a lining, secure them both in place by running a straight stitch along the inside edges of the combined folds (about 1/8 inch or 3 mm from those inside edges). This stitch will be visible so use matching thread color and keep it straight!

Step 6 — Finish the Bottom Facing

With the decorative fabric right side up, place the facing strip face down centered on the bottom of the shade panel. Baste and sew with a straight stitch across the width of the shade 3/4 inch (19 mm) above the aligned bottom edges. This stitch must be straight and 90 degrees to both edges.

Figure 7: Sewing the Facing Strip

Turn the assembly so the shade panel is decorative side down. Fold over the hem allowances on each side of the bottom facing to match the width of the shade on each side. If Seamstick is used to baste these hems in place sewing is not required.

Figure 8: Ready to Hem One Side of the Facing Strip

Now fold the facing strip over onto the back side of the shade and press the exposed seam edge on the bottom of the shade so that it is rolled slightly to the back slightly above the fold in the decorative fabric at the bottom of the shade. Press this fold in place.

Figure 9: The Facing Strip is folded to the Back

Then roll the facing strip Fold the top edge of the facing strip under until the strip itself is just 4 inches (101.6 mm) wide. (This 4 inch width will be just one inch when the narrow facing strips that result from stack height seeds of 5 inches or less (127 mm) are in play.)

Figure 10: Rolling Under the Top of the Facing Strip

Press this fold in place with an iron and then run two straight stitches across the width of the shade at the top of the facing strip. One of these stitches should be just inside the fold of fabric and the other 1 inch (25.4 mm) down. The weight rod will be inserted in the pocket of fabric formed by these stitches – it will thus be 3 inches above the bottom of the shade. Note that one stitch along the fold line creates the rod pocket in the narrow facing strip used for small segment depths. There will be no second stitch.

Figure 11: The Stitch at the Top of the Facing Strip

Step 7 — Mark Segments

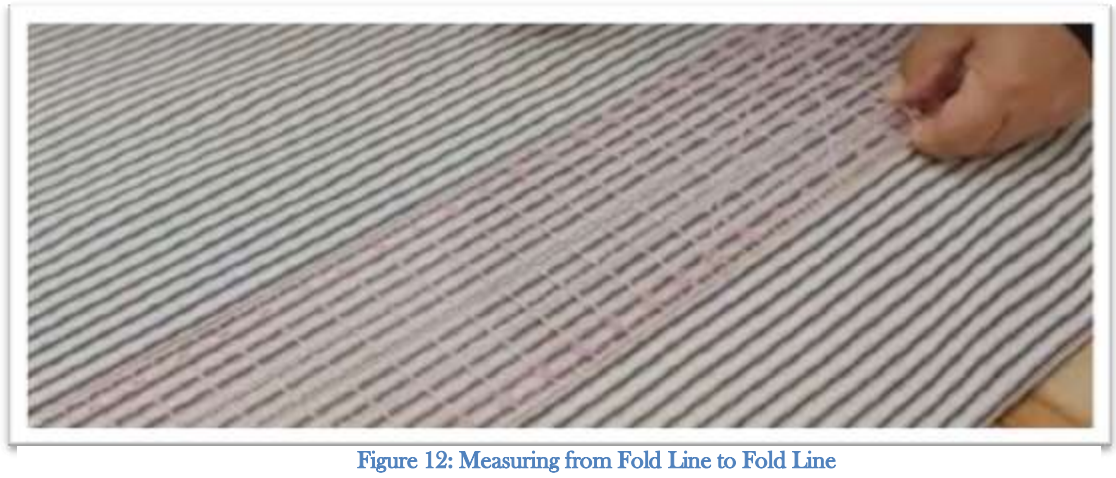


Figure 12: Measuring from Fold Line to Fold Line

Turn the assembly over so the shade is face up. Put down chalk lines on the decorative fabric to represent the fold line that defines each segment from the finished bottom of the shade up. The first mark will be 9.71 _____ inches above the bottom. The following 5 _____ segments are marked 15.64 _____ inches up from each previous mark. The final or shade top segment line can be ignored for now. It is not a fold line but rather the finished edge of the top of the shade. We will finish it in step 9 below.

Step 8 — Sew Slat Pockets

The decorative surface should be up at this point. Working from the bottom of the shade, fold it on the first chalk line that designates the bottom segment. The back sides of the shade should be together and the folded over edges should be flush in order to keep the slat pocket that we will make perpendicular. Keep the lining (if present) and the ornamental fabric smoothly together.

Figure 14: Folding the Bottom Segment Under

Crease the fold line carefully with an iron. Then carry out the same procedure on all the fold lines working up the shade. An alternative technique is to pin each fold in place. Pins can be especially helpful if there is a lining.

Figure 13: Crease the Fold Lines

Run straight stitches all the way across the shade above each fold line. In our case measure up from the slat folds 1.125 ____ inches. A magnetic guide can be used to assure the accuracy of this work.

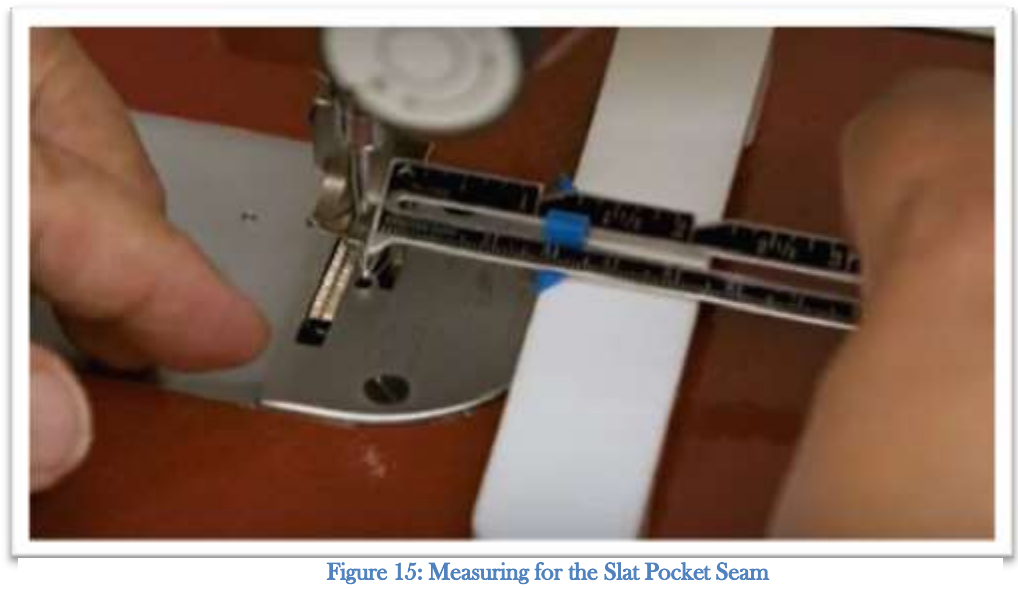


Figure 15: Measuring for the Slat Pocket Seam

Repeat this process on each chalk line all the way to the top of the shade. Then lay the assembly right side up and use a warm iron to press each pocket toward the bottom of the shade.

Figure 16: Sewing the Slat Pocket

Figure 17: Pressing the Slat Pockets

Step 9 — Finish the Top Edge

Measure the length of the shade from the finished bottom up. Put a mark at the point corresponding to its finished height. In our case that is 89.5 _____ inches. This final mark at the top should be roughly 16.85 _____ inches from the uppermost fold, but this measurement is likely to be somewhat more or less due to the fact that folding and sewing tends to shrink (and sometimes stretch) fabric assemblies. But the calculator will have added sufficient "fudge factor" to provide for this. All that matters is that we put our finish mark at the desired height from the bottom of the shade. Put down a line at this point.

Figure 18: Measuring for the Finished Height Mark

Then put down a second line 1 inch or so above the shade top line. Cut on this line to provide a 1 inch hem at the top of the shade. If there is a lining, baste the two layers of material along this cut line and fold it under onto the back side of the shade. Use Seamstick to hold the hem in place.

Figure 19: Trimming the Top of the Shade

Before sewing this hem baste a length of Velcro Loop along its length on the back side of the shade (on top of the hem). Then sew all round that Velcro tape.

Figure 20: Cutting on the Hem Line at the Shade Top

Step 10 — Sew Rings in Place

The 2 _____ lift lines are at 27 _____ inch intervals across the width of the shade with 1 inch (25.4 mm) margins at each edge.

Figure 21: Finish by Tucking the Thread inside if Possible

Sew 2 _____ rings along the top of each slat pocket as indicated in the calculator rendition. Use a thread similar in color to the shade fabric and keep the length of the stitch on the face of the shade to a minimum in order to reduce its exposure. Measure in from the edge 1 inch (25.4 mm) to place the first ring. Then space the second on at a 27 inch (685.8 mm) interval across the shade. Wider shades than the one we are building here will require more rings – the interval dimension becomes more significant then. The final ring should be 1 inch (25.4 mm) from the opposite edge. Repeat this for all slat pockets.

Step 11 — Install Lift Lines

There is 24 _____ feet of leech line recommended by the calculator for our project (any small braided cord will do but leech line works very well). Since our shade has just 2 lift lines, this length should be cut in half. Thread a line down each row of rings from the top to the bottom. Anchor each line below the bottom rings by sliding a plastic orb over the line ends. These orbs are spring loaded to lock onto the cord while providing some measure of adjustability.

Figure 22: Thread the Lift Lines from the Top Down

Step 12 — Headboard Installation

Prepare a headboard 29_____ inches long. These boards are often ¾ inch thick, but narrower ½ inch boards will look better if the shade is mounted outside the window frame. Cover the board with a scrap of material if you like to dress it up. Treat the board just as you would a wrapping a gift and staple the covering in place (the covering is optional).

Figure 24: Staple the Hook Velcro to the Headboard

Put screw eyes in the bottom of the headboard that match the placement of the rings on the ribs. Thread the lift lines into an appropriate cord lock before screwing it in place – this task is much easier to accomplish when the lock can be accessed at top and bottom. Then install the cord lock just 1 inch or so (25.4 mm) inside one of the outside screw eyes (left or right depending on pulling preference). Velcro hook tape (assuming loop was sewn to the shade in step 9 above) should be stapled to the front of the headboard. Mount the headboard inside the window frame. Thread all lift lines through appropriate screw eyes and on to the cord lock.

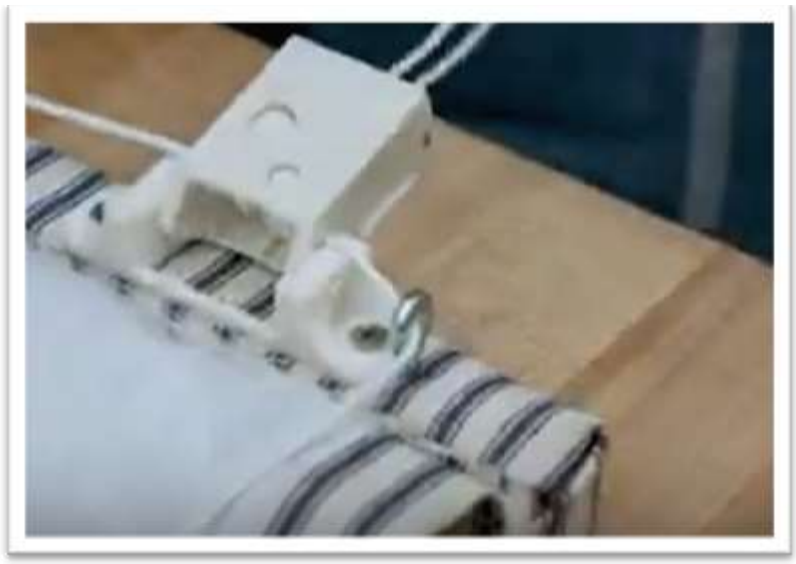


Figure 23: The Cord Lock Mounted on the Headboard

Step 13 — Insert a Weight Rod and Ribs

Cut a brass weight bar with a hack saw so that it is 1.5 inches (38.1 mm) shorter than the shade width (29 _____ inches here). Insert it between the two stitch lines in the facing strip at the bottom of the shade. There will be just a single stitch line forming a pocket at the bottom of shades with short segments. Close the ends of the pocket with needle and thread by hand. Make 6 battens 1/2 inch (12.7 mm) shorter than the shade's width (29_____ inches). Insert them in the pockets and sew those pockets shut just as above.

Step 14—Install the Shade

Screw the headboard in place and secure the shade by smoothing the Velcro tapes in place over one another. Raise and lower the shade. Adjustment can be made by reattaching the Velcro tapes or by sliding the lift line orbs up and down.

Figure 25: Face Mounted Headboard

When the lift cords are trimmed to a comfortable height, you may want to "dress the ends" of the cords by using a condenser to transfer to a single cord with perhaps a tassel. Reducing the number of cords in the final pull cord is a safety consideration.

Figure 27: Installing a Cord Condenser

Figure 26: A Tassel Knot

Step 15—Shade Training

Retract the shade and let it stand with proper folds for several days. This will encourage consistent behavior every time it is raised and lowered.