

# Making <br> <br> pleated draw draperils 

 <br> <br> pleated draw draperils}


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Drapery construction does not require a highly developed skill in sewing, but faithful and careful following of directions and accuracy of measurements are necessary to obtain a satisfactory protuct.

Consult Texas Agricultural Extension Service Bulletin 971, "Beautify Your Windows and Glass Walls," for help in deciding how you want your draperies to look, in selecting fabric and in choosing drapery rods.

Fabrics may stretch after months and years of hanging or shrinkage may occur in cleaning. Linings and drapery fabrics usually stretch or shrink in different amounts. Lengthwise machine stitching usually will stretch less than the material and may cause unsightly wrinkles and twisting to appear along the side hems.

The methods recommended in this bulletin for making handmade draperies allow fabrics and linings to stretch in different amounts without detracting from the appearance of the draperies.

Handmake your draperies working on a flat surface if you want them to continue to hang gracefully, Figure 1.

## STEPS IN MAKING DRAPERIES

1. Decide what space you want your draperies to cover.
2. Choose and install suitable drapery rods. See page 14 Extension Bulletin 971, "Beautify Your Tiindows and Glass Walls."
3. Measure and determine the amount of drapery material and lining needed.
4. Select and purchase material.
5. Construct and hang the draperies.

## ToOLS AND SUPPLIES NEEDED FOR MAKING DRAPERIES

- Scisors, thimble, needles, pins ànd sewing gauge
- Tape measure that will not stretch
- Tailor's chalk or tailor's pencil
- Rods, brackets and drapery hooks
- Purchase the following after measurements are taken:

Drapery fabric and matching heavy duty thread

Lining and matching heavy duty thread
Crinoline for heading
Weights, either braid or single lead types (optional)

If lead weights are used, buy one for each lower corner and one may be used at each seam. Larger weights are used in long heavy curtains. Use smaller ones in short lightweight curtains. Fabric covered lead shot is more suitatble for sheer curtains, Figure 2.


Figure 1.
Figure 2.


The "pin-on" weight is convenient to use and is removed easily for dry cleaning, laundering or pressing curtains, Figure 3. The round disc or square weights may be covered with the curtain fabric and tacked in place, or a piece of twill tape or selvage is drawn through the center of the disc and stitched to the inside edge of the hem, Figure 4. Lead weights in waterproof tapes also are available.

## MEASURING AND DETERMINING AMOUNT OF MATERIAL NEEDED

To determine the length of draperies, measure from the top of the rod straight down to the point where the curtain will stop - the floor, the apron or the sill. ${ }^{1}$ Add $1 / 2$ inch to this figure so that the drapery may extend $1 / 2$ inch above the rod (except when draperies are fastened to the ceiling). For floor length draperies, subtract 1 inch because finished draperies should hang about 1 inch above the floor or carpet.

To determine the length of each cut, add allowance for a lower hem and 1 inch to turn to the back of the crinoline at the top, Figure 5. Double hems may be used to add weight and to allow for adjustments to other windows. When doubled hems are desired, double the allowance for hems.

## Widths of Material Needed

To the length of the rod, add about 3 inches for overlap at the center, the amount needed to cover the two returns to the wall and the desired amount for fullness. Fullness is the term given the material that is allowed for pleats. Double the figure obtained above for 100 percent fullness. Multiply by $21 / 2$ for 150 percent fullness. More than 100 percent fullness usually is desirable.

For tailored curtains made from plain material, a 3 -inch allowance on each width usually is enough to take care of cutting off the selvage edge and making seams and hems. On fabrics with a pattern, a greater allowance may be needed for matching. (See page 7.) Divide the total width, including fullness, by the width of the material after allowing for seams, hems and selvages to determine the number of widths needed.

[^0]If the number of widths figured is an odd number and the draperies are to be made in two panels, half of one width will go on each panel. If you do not want to use a half width in each panel, buy material for an extra width and use a full width instead of a half width on each panel. This additional width will increase the amount of fullness in your curtain.

## Yardage Needed

To determine the amount of material you will need, multiply the length of each cut by the number of lengths needed. Use the examples on page 5. Measure the space to be curtained and write the measurements in the column for your windows. Then compute the yardage needed following the steps used in the example.


Figure 3.


# EXAMPLE FOR CALCULATING THE AMOUNT OF PLAIN MATERIAL NEEDED FOR MAKING DRAW DRAPERIES 

(For a window 9 feet wide ( 108 inches) and 6 feet 10 inches high.)

Distance from top edge of rod to floor or carpet ( 6 feet 10 inches) Finished drapery should extend $1 / 2$ inch above rod (add)
Allowance to clear floor or arpet (subtract)
Finished length of drapery
Allowance at top for turning to
back of crinoline in heading (add)
Bottom hem allowance, $31 / 2$ inches (single hem)
Total material need for each length
or cut, 86 inches (Figure 5)
Number of widths needed (Compute for
1 panel or $1 / 2$ of the window.)
Width to be draped is 9 feet or
108 inches (entire window)
Width of one panel which will cover
half of the window ( $1 / 2$ of 108 inches)
Deph of one return
Orerlap at center allowance
Drop $1 / 2$ inch $^{2}$
For 150 percent fullness, multiply b) $21 / 2(21 / 2 \times 60$ inches $=150$ inches $)$.
Example
Window
Measurements

82 inches
$\frac{+1 / 2 \text { inch }}{821 / 2 \text { inches }}$
$\frac{-1 \quad \text { inch }}{811 / 2 \text { inches }}$
$811 / 2$ inches
1 inch
$31 / 2$ inches

86 inches

54 inches
$31 / 2$ inches

| $\frac{3}{}$ inches |
| :--- |
| $601 / 2$ inches |
| $60 \quad$ inches |

Your
Window
Measurements
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


Figure 5.


[^1]The width of the material is 48 inches; about 3 inches will be used in hems, seams and cutoff selvages leaving about 45 inches per width ( $150 \div 45=3$ widths plus 15 inches). Buy $31 / 2$ widths ( $1571 / 2$ inches) for each side or 7 widths for 2 panels.

> When each panel is hemmed, it will be about 157 inches wide ( $31 / 2$ widths $\times 45$ inches).
> Material needed for each length 86 inches
> 7 lengths (both sides of window) $\times 7$
Total material needed
> ( 602 inches $\div 36$ inches $=16$ yards, 26 inches)

Crinoline 4 to 6 inches wide is needed for stiffening the drapery heading. Buy enough to extend across the top of each drapery; add 10 inches for each drapery panel or add 20 inches for each window. In the above example each panel requires 167 inches ( 157 inches +10 inches) which is 4 yards, 23 inches.


Figure 6.

## Yardage Needed for Printed Draperies

Matching printed materials requires a full number of pattern repeats for each length or cut. ${ }^{3}$ Find the exact places where the pattern design or motif begins and ends, Figure 6. Measure this distance. This is called the pattern repeat. In the example on page 5 each length will be cut 86 inches long. If you select fabric with a pattern repeat of 9 inches, divide the length of the cut by the pattern repeat to find the number of pattern repeats needed for each length. For example, 86 inches $\div 9=95 / 9$ repeats. It would be necessary to buy 10 full repeats or 10 inches $\times 9$ inches or 90 inches for each length. Four inches of each 90 -inch length will not be used, but it must be purchased to match the design. Seven widths each. 90 inches long would require 7 widths $\times 90$ inches, 630 inches or 17 yards, 18 inches.

Note: When buying printed material, notice whether the material was cut where the motif begins. If not, have the sales person begin your measurement at the beginning of a motif or design.

[^2]
## Yardage Needed for Lining

When lining material is the same width as the drapery material, buy the same amount omitting any allowance for matching designs. If lining and drapery materials are not the same width, determine the number of lining wielthes needed by dividing the width of each drapery panel by the width of the lining material after allowing $11 / 2$ inches for seams and cutting off the selvages. Multiply the number of widths by the length of drapery cut to find the amount of lining material you need.

If the lining is not labeled sanforized or "will not shrink more than 1 percent," allow 3 inches per yard for shrinkage and shrink it before putting it into drapery that will be washed, or if the lining is likely to become damp. Before shopping for material read Extension Bulletin 971, "Beautify Your Windows and Glass Walls."

## CONSTRUCTING AND HANGING DRAPERES

Measure every cut carefully and mark it on the material before you cut into the yardage, regarl. less of the type of curtain you are making. This makes it possible to detect any flaws in the fabric and to mark each cut at the same place in the pattern of the figured material.

Measure from the straight cut edge for the length of your drapery plus the hem. If it does not look straight, pull it from the short corner and the opposite corner at the same time until it is straight, Figure 7.

It is rarely possible to spread all of the fabric at one time, so spread the material for the first cut, measure and pin mark it and then fold each succeeding cut over the one before it. Draw a thread and cut, following the pulled thread to be sure the drapery is cut straight and on the grain, Figure 7.


## HANOMAKNG LINED DRAW DRAPERIES

1. Trim off selvages, Figure 8.
2. Pin baste the lengths together for one side of drapery (one panel) and machine stitch, using a loose stitch or hand sew. Use plain $1 / 2$-inch seams for plain material. Clip the edges slightly to prevent long raveling, Figure 9. Pin a lapped seam matching the design and slip stitch for figwrel material. Press. Turn right sides together and machine stitch or hand sew along the pressed lold. (See Figure 10.) Open seams and press.
3. Turn the side hems 1 or $11 / 2$ inches; pin and press, making sure that the turned edge follows athread or is exactly on the grain of the material, Figure 11.


Figure 8.
4. Turn the bottom hem, pin and press. Make the bottom hems $31 / 2$ inches deep. Lower hems may be doubled in opaque materials to add weight and to allow for possible shrinkage and adjustments should the draperies be moved to other windows.

Hand miter the corners of the bottom and side hems. Pin mark the places where the inside edges of the side and bottom hems meet and also at the lower corners, Figure 12.

Open the hems and fold the fabric to the wrong side making a diagonal fold from one pin to the other. Crease or press along the fold, Figure 13.


Figure 10.
Figure 11.


Figure 12.
Figure 13.


Refold the hems leaving the material folded inside the hem, Figure 14. The inside folded material should be tacked in place if draperies are to be laundered.

Join the diagonal fold lines of the hems by slip stitching, Figure 15. When the lower hems are doubled, usually it is better not to miter the corners.
5. Heading. Measure for crinoline across the top of each drapery panel from pressed edge to pressed edge. Add 10 inches. Double back 5 inches at each end. Doubling crinoline at the ends strengthens the drapery at these points and should prevent curling or drooping, Figure 17. This should be done unless the crinoline is quite heavy and stiff.
6. Open the pressed side hems. Lay the crinoline (with ends folded) on the wrong side of the drapery material at the top, allowing a 1 -inch overlap, Figure 16. Stitching should be about a half inch from the edge of the material. Stitch over the pins to prevent the fabric from slipping during stitching, Figure 17.


Figure 14. $\longrightarrow$ Figure 15.



Figure 16.
7. Turn the crinoline down on the wrong side of the drapery so that its upper edge comes into the fold at the top of the drapery and the folded ends of the crinoline come into the fold of the side hems. Remove pins; push crinoline well against the top fold of the material, Figure 16 b ,
8. Pin, baste and catch stitch the side and bottom hems, Figure 18. The catch stitches cross over the raw edge and prevent raveling and allow for stretching without puckering. (The catch stitches in Figure 18 were enlarged and sewn in black thread instead of matching thread to show the stitches more clearly.) The hem in the photograph was basted and hung for a few weeks to allow for possible stretching before the permanent stitching was done.
9. Prepare and attach lining. Cut off selvages. Sew the lengths of lining for one drapery panel together using a plain seam. Press seams open. Sew lining hems $11 / 2$ inches deep; use machine stitch or catch stitch.

Pin mark the center of the lining and the center of the drapery at the top and bottom; place the wrong sides together. Smooth the lining flat over the drapery, with the lower edge of the hemmed lining 1 to $11 / 2$ inches above the lower edge of the drapery.
10. Pin the center lining to the center of the drapery, top to bottom. Fold the lining back on the line of pins and tack to the drapery.

Use a thread twice the length and the same color as the drapery. Starting at the lower edge of the crinoline, tack the center of the lining to the center of the drapery. Using a double thread, make stitches about 4 to 6 inches apart. To make a stitch, loop the thread as for a buttonhole, Figure 19. Picking up a thread in the drapery fabric with the needle still in the loop of the sewing thread, pick up a few threads of the lining material on the fold. Leave the thread very slack. Stitches should stop about 6 inches above the hem, Figure 19.

Hand crochet a swing tack $11 / 2$ inches long to fasten the top of the drapery hem to the top of the lining hem exactly below the tacking. Swing tacks may be made like dress belt loops using strong thread such as a buttonhole twist or two or four strands of heavy thread. Fasten the thread to the top of the drapery hem between the lining and drapery by sewing it two or three times in the same place, Figure 20A. Leave the fourth stitch loose enough for a loop and hand crochet a chain stitch the desired length, about $11 / 2$ inches, Figures 20B, C and D. Pull the sewing needle through the last loop (Figure 20D) and fasten with the needle securely to the top of the lining hem, Figure 20 E .

Figure 17.



Figure 18. Figure 19.


Repeat the previous steps half way between the center and sides of the drapery. On a very large drapery, tacking and swing tacks should be placed about every 18 inches, Figure 21.

When the lining is wider than the drapery, pin mark or chalk mark $1 / 2$ inch from the edge and cut off the lining outside of the marks, Figure 22.

Fold the lining edges under, covering half of the drapery side hems, Figure 23. Pin. Fold under at the top about even with the machine stitching. Pin, easing in the lining a little.

Slip stitch the lining to the drapery at the sides and top using stitches $1 / 2$ to $3 / 4$ inches long, leaving the thread loose to allow for stretching of either lining or drapery without puckering.



## DIVIDING THE DRAPERY PANEL INTO PLEATS AND SPACES

The following example divides the material calculated for half of the window. In the example on page $5,1571 / 2$ is approximately the width which $31 / 2,48$-inch widths would make (actually $31 / 2 \times 45$ inches). This is the width of the finished unpleated drapery. Measure your finished unpleated panel and write the measurement in the column "Your Drapery Measurements." Follow the steps shown.

1. Measure the exact width of your lined unpleated drapery and write the measurement under "Your Drapery Measurements."
2. One drapery will cover one-half of the window (the window is 108 inches wide).
3. Add 1 inch for ease for a large window; on smaller windows use a $1 / 2^{- \text {-inch }}$ ease on each side. ${ }^{4}$

Fifty-five inches will be divided into equal spaces between pleats.
4. Add center overlap.
5. Add 1 return ( $31 / 2$ inches).
6. This will be the width of the heading after pleating.
7. The amount remaining will be used in making pleats ( $1571 / 2-611 / 2$ ) ; subtract No. 6 (above) from No. 1.
8. Five to 6 inches usually are satisfactory amounts to use for each pleat. Dividing the amount of material for pleats by the amount for one pleat will give the number of pleats ( 96 inches $\div 6$ inches $=16$ pleats). Since allowance for each pleat will be 6 inches, a 6 -inch cardboard gauge should be cut and the word "pleats" written on it, Figure 24.
9. The number of spaces between the pleats is always one less than the number of pleats. If there are 16 pleats there will be 15 spaces.
10. Dividing the amount for spaces (No. 3) by the number of spaces will determine the width of each space ( 55 inches $\div 15=32 / 3$ inches).

| Example |  | Your Drapery <br> Measurements |
| :---: | :---: | :---: |
| 1571/2 inches |  |  |
|  | inches |  |
|  | inch |  |
|  | inches |  |
|  | inches |  |
|  | inches |  |
| $611 / 2$ inches |  |  |
|  | inches |  |
| 166 | pleats, |  |
|  | inches each | - pleats |
|  | spaces | _ spaces |
| $32 / 3$ inches |  | - width o |
| (width of spaces) |  | space |

[^3]

Cut a $32 / 3$-inch gauge and mark it "spaces," Figure 25.

Since there are no marks on a ruler for measuring thirds, use $11 / 16$ inch, which is about the same as two-thirds.

Use pins to mark the pleats and spaces; pins may be moved to make slight adjustments, if needed.

Spread the drapery flat.


Figure 25.


Figure 26.
Figure 27.


Beginning at the side of the drapery panel which will be at the center of the window, measure the space for the overlap. Place pins straight from the top of the crinoline to the bottom edge of the crinoline, Figure 24.

Using the pleat gauge, measure and mark a space for a pleat with pins, Figure 24.

Using the space gauge, measure and mark a space with pins, Figure 25. Repeat until you have the correct number of pleats and spaces. There should be $31 / 2$ inches left for the return to the wall, Figure 26.

Measurements for the size of pleats and spaces rarely will work out exactly. Make necessary adjustments by moving the pins slightly, being sure that the space measurements are the same.

To make the pleats fold right side out, through the crinoline, bring the pins at the sides of each pleat space together and pin, forming large tucks, Figure 27. Pin all pleats and measure to see that the drapery will be the correct size when stitched, Figure 28. Machine stitch each pleat from the top to the bottom of the crinoline. Back stitch $1 / 2$ inch at both top and bottom or tie threads to prevent raveling.

Divide each large pleat into three equal parts (Figure 29A) and sew by hand at the bottom of the crinoline (Figure 29B). Figure 29C shows the finished pleat.

Carefully fold the draperies at pleats, Figure 30. Allow to lie folded several days to set folds. Insert hooks behind each pleat on the stitching line. The top of the drapery should be placed $1 / 2$ inch above the top of the rod when hung. One hook should be behind each pleat, at the center overlap and in the return to the wall.

Insert hooks into drapery glides to hang the draperies. Adjust the hooks up or down as necessary for proper hanging of the draperies.

Draperies for large windows or glass walls may be bulky and heavy to handle. Sometimes it is advisable to make these in two or more smaller panels. Linings may be brought to the edge of drapery panels, if desired. Allow for overlap of about 3 inches where draperies are joined, Figure 31.

Hang separate panels (Figure 31) and then join as follows: at the top use special hooks made for joining ready-made drapery panels, Figure 32. Below the heading, panels may be joined with swing tacks (Figure 20) every 9 to 12 inches. The swing tacks can be clipped and joining hooks removed when it is necessary to take the draperies down.

Additional advantages of this plan are that panels may be shifted so that areas receiving the greatest wear and greater amounts of possible damage from sunlight may be moved to points of less wear and damage. Thus, a longer period of usefulness may be obtained.

## MAKING DRAPERIES WITH PLEATER TAPES

For exact fit of the drapery to drapery rods:

1. Place rods at windows, following the directions on page 14, Extension Bulletin 971, "Beautify Your Windows and Glass Walls."
2. Measure rods.
3. Study different types of pleater tapes. Choose one that most nearly fits your needs. Be sure to choose one that will not shrink.
4. Buy pleater tape about three times the length of rods. Purchase approximately 1 pleater hook for each 3 inches of rod length.


Figure 30.


Figure 31.
Figure 32.


Figure 33.
Figure 34.


Figure 36.
12. Fold the ends of the tape under and stitch the ends to the edge of the drapery.
13. Pin or baste the tape flat and stitch to the drapery along the lower edge of the tape, Figure 38.
14. Finish side and bottom hems. Insert the prongs of the hooks in marked pockets and hang the finished draperies on the rods.

When using sheer material, pin a double hem the width of the tape at the top of the curtain before attaching the tape. This will keep the tape from showing through on the right side of the draperies. Be sure to allow for the double hem at the top when purchasing and cutting the lengths.

## UNLINED DRAPERIES

Follow the directions for measuring for lined draperies. Measure the width of the crinoline and add this amount to each length of material purchased. This length is added to allow for covering the back of the crinoline. If you want to double the bottom hems, one additional hem width also must be added to each length. Machine-made draperies probably are more satisfactory if unlined and if machine is adjusted to prevent puckering.

Cut off selvages. Use French seams in joining the lengths of material. This will prevent raveling and give a better appearance from outside of the window.

For hems, turn the raw edges under about 4 inch; turn the material the desired width. Pin hems and press, being sure the folds are on the thread. Miter lower corners as for lined draperies.

Overlap the crinoline 1 inch on the wrong side at the top of the drapery and stitch. Turn the ainoline to the wrong side and push the crinoline
well into the fold. Turn the crinoline down again so that the back side of the crinoline is covered.

For pleating, follow the directions for lined draperies.

Weights for unlined draperies may be placed inside the lower hem at the side hems and seams before the lower hem is stitched.

## MAKING SHEER PLEATED DRAPERIES

Sheer draperies are more attractive and provide more privacy when they are very full. The amount of fullness may vary from 250 to 400 percent ( $21 / 2$ to 4 times the width of the window).

Cut off selvages and draw threads to straighten material.

Sheer draperies are more attractive when all of the hems and the material covering the front side of the crinoline are doubled. To make double hems, turn the raw edges the width desired for the hem and press. Turn again. Pin, press and sew using a loose slip stitch.

To double the material in front of the crinoline, overlap the crinoline $1 / 2$ inch on the wrong side of the material; pin and stitch. Turn the crinoline down on the wrong side pushing the crinoline well into the top fold and turn again. Pin and press.

To determine the amount of material needed for sheer draperies, measure as shown on page 4. To each length of material needed, add twice the width of the crinoline and twice the width of the hem.

Use fabric covered lead shot for weight in bottom hems, Figure 2.

Slip stitch the back and front of the doubled hems together at the ends, Figure 2.

Figure 37.


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[^0]:    ${ }^{1}$ See page 15 in Extension Bulletin 971, "Beautify Your Windows and Glass Walls."

[^1]:    Dropping $1 / 2$ inch is permissible because it has little effect wa the number of widths to be used.

[^2]:    ${ }^{3}$ The words widths, lengths and cuts are used interchangeably in computing material needed for draperies.

[^3]:    Draperies tend to slack or ease when pulled taut. The slack can cause draperies to hang slightly open at the center unless there is sufficient overlap and allowance for ease.

