A zipper is a fastener that closes a seam. It is made of teeth or interlocking coils attached to woven or knit tape, and it opens and closes with a slide and pull tab (figure 1).

Select a zipper according to the type and length needed, location on the garment, and fabric weight and color. When the zipper is attached, it should slide easily and be hidden when closed. The topstitching of the zipper should be straight, even, and neat.

The centered application (figure 2a) is used at the center front or center back of pant, skirts, and dresses. It is suitable for lightweight, medium-weight, and heavyweight fabrics. The lapped application (figure 2b) may be used in the same places as the centered application, but it is most often used at side seams, pants fronts, or skirt openings, where more coverage of the zipper is needed. It is suitable for light- and medium-weight fabrics. Centered and lapped zippers use a conventional zipper, which is closed at one end and sewn into a zipper placket.
Preparing the zipper and zipper opening

Zippers should not need preshrinking, unless you are using a stretch fabric, which is washed before stitching. To preshrink a zipper, place it in hot tap water for a few minutes, and then let it air dry.

Determine the length of the zipper opening by measuring the closed zipper from the lower edge of the bottom stop to the top of the slide. Add the following additional amount of seam opening to finish the facing or waistband (figure 3):

- **Neckline**: Add ½ inch (1.3 cm) plus ⅜-inch (1.5 cm) seam allowance for facing, a total of 1⅛ inch (2.8 cm).
- **Pants or skirt**: Add ⅜ inch (1 cm) plus ⅜-inch (1.5 cm) seam allowance for waistband or facing, a total of 1 inch (2.5 cm).

If you need to shorten a zipper, mark the new desired length on your zipper with a marking pen or chalk. Then measure ¾ inch (1.9 cm) below this new desired length marking and whipstitch several times over the chain or coil with a double thread. You can then cut off the excess zipper and tapes about ½ inch (1.3 cm) below the whipstitching (figure 4).

Sew and finish the seam beyond where the zipper will be inserted. Staystitch the zipper opening, especially if the seam is curved or the fabric is stretchy. Use matching thread and regular-size stitches ¼ inch (6 mm) from the cut edge. Press the seam open.

Prepare for topstitching before you begin to apply the zipper. There are two easy methods: adhesive sewing tape and machine-basting.

Apply **adhesive sewing tape** to form a guideline after pressing the seam open. Place one edge of the tape along the desired topstitching line (figure 5). The topstitching line is usually ¼ inch to ⅜ inch (6 mm to 1 cm) from the basted seam for a centered application or ⅜ to ½ inch (9 mm to 1.3 cm) for a lapped application. Plan to stitch next to, but not through, the tape so it will not be difficult to remove. Then apply the zipper, following the lapped or centered method.

To **machine-baste** the topstitching guideline, first press the seam open. Spread the garment flat, wrong side up, and lift up each seam allowance. Machine-baste through the outer fabric along the desired topstitching line, stitching from the bottom to the top (figure 6). The topstitching line is usually ¼ to ⅜ inch (6 mm to 1 cm) for a centered application or ⅜ to ½ inch (9 mm to 1.3 cm) for a lapped application. When topstitching, you will stitch next to, but not through, the basting line through all thicknesses of fabric, and the basting stitches will be easy to remove. Then apply the zipper, following the lapped or centered method.
**Centered application**

Prepare the seam by determining the length of the opening plus an allowance for finishing the facing or waistband. Machine-baste the seam closed. Press the seam open, and then clip both of the basting threads at the bottom of the opening. Clip just the bobbin thread at 1-inch (2.5-cm) intervals so you can easily remove the basting later (figure 7).

With the bottom of the zipper opening away from you, extend the right seam allowance. Open the zipper, and place it face down on the extended seam allowance. Put the zipper bottom stop at the intersection of the seam and the basting. Position the coil or teeth next to the seam, and then pin in place. Place the zipper foot to the right of the needle, and machine-baste the right zipper tape along the stitching guideline, starting at the bottom of the zipper tape (figure 8).

Close the zipper, and then extend the left seam allowance. Place the zipper foot to the left of the needle, and machine-baste the left zipper tape along the stitching guideline, starting at the bottom of the zipper tape (figure 9).

Turn the garment right side up, and spread it flat. Adjust the machine to regular stitch length. Starting at the center seam at the bottom of the zipper, topstitch across the zipper bottom. Turn and topstitch along the topstitching guideline to the top of the zipper opening. Repeat the procedure for the other side, beginning again at the center seam. At the bottom of the zipper, bring the top threads to the inside and tie. Remove the topstitching guideline and press (figure 10).
Lapped application

Prepare the seam by determining the length of the opening plus an allowance for finishing the facing or waistband. Machine-baste the seam closed. Press the seam open, and then clip the basting threads so you can easily remove the basting later.

Working on the inside of the garment, extend the right seam allowance. Open the zipper and put it face down on the extended seam allowance with the bottom of the zipper away from you and even with the seam and basting intersection. The teeth or coil of the open zipper should be next to, but not on, the seam. Place the zipper foot to the right of the needle. Staring at the bottom of the zipper, machine-baste evenly about ¼ inch (3 mm) from the zipper teeth or coil, stitching only through the tape and seam allowance (figure 8). Stitching may curve out slightly around the slide and pull tab.

Place the zipper foot to the left of the needle, adjust the machine to regular stitch length, and close the zipper. Turn the zipper face up, folding the seam allowance on the basting and keeping the zipper flat. Starting at the bottom of the zipper tape, stitch through the fold and tape (figure 11).

Turn the garment right side up, and spread it flat. Check that the zipper is flat beneath the basted seam allowance and that there is a small pleat formed by the stitching through the fold at the zipper bottom. Hold the pleat in place, and mark the zipper bottom with a pin. Begin topstitching at the seam, and stitch across the zipper bottom to the topstitching guideline. Pivot and continue stitching along the guideline. If the fabric is a waistband or standup collar, stitch to the edge of the fabric. If there is a faced edge, stitch to 2 inches (5 cm) from the edge, cut off the end of the zipper tape at the facing seamline, and continue stitching to the edge (figure 12).

Bring thread ends to the inside and tie. Also on the inside, lift the right seam allowance that was first basted (figure 13). Clip and remove the machine basting that closes the seam. Remove the topstitching guideline and press.
**Finishing**

After the zipper is inserted, you are ready to apply the facing, waistband, or standup collar. If you apply a waistband or standup collar, the top of the zipper tape will be included in the waistline or neckline seam.

If you apply a facing, fold under the edge and hand-stitch along the zipper tape, remembering to allow free movement of the zipper slide (figure 14). For most fabrics, use a hook and thread eye or snap at the top of the zipper opening (figure 15). The blanket stitch thread eye is stronger, although the thread chain eye is satisfactory. If the hook might snag the fabric, use extended or hanging snaps.

**References**


![Figure 14. Facing: centered application (top), lapped application (bottom).](image)

![Figure 15. Closures: hook and eye (left), extended snap (top), hanging snap (bottom).](image)