Seams and Seam Finishes

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Seams hold garment sections together. A well-sewn seam is smooth, never stretched and never wobbling. It is finished without a tangle of ravelings or crooked edges. Before sewing garment sections, test the stitching on scraps of fabric so that the machine tension, pressure and stitch regulator can be adjusted to create smooth, well-sewn seams. Remedy seam wobbles and poor stitching by ripping and restitching. Postponing these corrections until other sewing procedures are made makes corrections difficult and sometimes impossible.

PLAIN SEAMS
Plain seams are the most common type used. They are suitable for most weights and types of fabric; however, if the fabric tends to ravel, a seam finish will be needed.
Method:
1. Pin the seams right sides together, matching notches and markings.
2. Machine stitch along the seam line, usually 5/8 inch (1.5 cm.) from the raw edge, backstitching at each end (Figure 1).
3. Press the seam allowances together along the seam line to blend the stitches into the fabric.
4. Press the seam allowances open, unless instructed otherwise on the pattern guide. If the edges of the seam allowance leave a ridge on the right side of the fabric, press over a seam roll or press with heavy paper placed under the seam allowances. If the fabric tends to mar or the iron leaves an imprint, use a press cloth or sole plate cover on the iron.

DOUBLE STITCHED SEAM
These seams are used in the lower crotch area of pants and to simulate a French seam on curved areas in sheer fabrics.

Method:
1. Press the seam allowances together.
2. With the two edges of the seam allowance together, machine zigzag (or use the multi-stitch zigzag) in the seam allowance, 1/8 inch (3 mm.) from the first stitching (Figure 2). When only a straight-stitch machine is available, a second line of stitches may be sewn through both seam allowances, 1/4 inch (6 mm.) from the seam line.
3. Trim the seam allowances close to the second line of stitching.
4. Press the seam allowances to one side.
OVEREDGE SEAM

If the machine sews straight or stretch stitches and overcasts in one operation, this seam is suitable on light to medium weight fabrics and for knitted fabrics. These seams, especially if sewn with a stretch stitch, are difficult to take out. Therefore, use only after you are sure that the garment fits perfectly and that the seams are permanent.

Method:
1. With the right sides of the fabric together, stitch on the seam line (Figure 3).
2. Trim the seam allowance to a narrower width either before or after stitching.
3. Press to one side.

SEAMS WITH EASE

Good fit is achieved in some areas by adding length to one edge and easing the fullness into the seam.

Method:
1. Stitch between the pattern markings on the seam allowance close to the seam line, using 8-10 stitches per inch (3-4 per cm.).
2. Pull up the bobbin thread until the larger section fits the smaller one.
3. Pin the sections together, distributing the fullness or ease evenly. Stitch the seam.
4. Press the two layers together to shrink out the fullness and then press the seam allowances open.

PRINCESS OR CURVE SEAMS

Curved seam lines will be easier to stitch and more accurate if staystitched and clipped before sewn.

Method:
1. Staystitch both curved edges on the seam allowance, 1/8 inch (3 mm.) from the seam line, using a stitch length of 10-12 stitches per inch (4-5 per cm.).
2. Clip the inward curving seam allowance to the staystitching so that it will lie smoothly (Figure 4).
3. Pin, matching the markings and notches, and stitch the two sections together along the seam line.
4. If the fabric is heavy, notch the outward curving seam allowance where the clips overlap, so that the seam allowance lies flat and the edges of the notches meet (Figure 5).

SEAMS WHICH CROSS

Before crossing one seam with another, press and finish the two seams.

Method:
1. Pin the raw edges together along the seam line.
2. Place pins through the seam lines and seam allowances of the two intersecting seams to facilitate matching (Figure 6).
3. Pin the rest of the sections together and stitch.
4. After stitching, trim the corners of the seam allowances diagonally as shown (Figure 7).

SEAMS WITH CORNERS

These seams are found on gussets and some styles of yokes. The corners should be reinforced with stitching before the seam is sewn.

Method:
1. Using 15-20 stitches per inch (6-8 per cm.), stitch about 1 inch (2.5 cm.) on both sides of the point, stitching close to the seam line on the seam allowance.
2. Pivot the stitching at the corner by stopping with the needle in the fabric, lift the pressure foot and
rotate the fabric on the needle to change the direction of stitching.
3. Lower the pressure foot and continue stitching.
4. Clip the inward corner to, but not through, the reinforcing stitches (Figure 8).
5. To seam, follow the directions on the guidesheet to position the two corners for sewing.
6. Match the seam lines along one edge with the uppermost clipped corner.
7. Stitch to the corner on the seam line (Figure 9), pivot and continue stitching (Figure 10).
8. Finish the point by one of these methods.
   • Press the seam allowance open and trim the fullness from the outward corner. Catchstitch the trimmed corners together (Figure 11).
   • Press both seam allowances toward the outward corner and trim the fullness from the outward corner. Catchstitch the trimmed edges of both seam allowances together (Figure 12).
   • Press both seam allowances toward the inward corner (Figure 13).
STRETCHY SEAMS
If the fabric tends to shift or stretch during the sewing, the seam will be uneven. Correct this by stitching through paper.
Method:
1. Place tissue or slightly heavier paper on the machine bed under the seam.
2. Stitch through both the fabric and the paper.
3. Carefully tear the paper away. Sometimes paper is also needed between the pressure foot and the top layer of fabric.

FINISHES FOR PLAIN SEAMS
Seam finishes are used to prevent fabrics from raveling or fraying and to give the inside of the garment a professional finish. The seam finishing technique chosen depends on the fabric as well as whether the seams will be seen when the garment is sewn.

TURNED AND STITCHED FINISH
The turned and stitched finish is sometimes called a “clean finish,” and it is suitable for light to medium weight fabrics. It is often used to finish the edges of neckline and front facings and the seams in unlined jackets.
Method:
1. Press the seam allowance open.
2. Fold the seam allowance under 1/4 inch (6 mm.).
3. Machine stitch along the fold (Figure 14).

OVERCAST FINISH
This is a traditional hand finish that is used when other techniques are impossible.
Method:
1. Press the seam allowance open.
2. Make stitches over the edge of the seam allowance, putting the needle through from the wrong side to the right side of the fabric about 1/4 inch (6 mm.) from the raw edge (Figure 15).
3. Keep the stitches evenly spaced and at a uniform depth.

MACHINE ZIGZAG FINISH
The zigzag finish is widely used since it is easy to use on both straight and curved edges, and it prevents fraying very well. The multi-stitch or three-step zigzag is recommended for all weights of fabric since it is less conspicuous than the plain zigzag, and it generally prevents the raw edge from rolling. The plain zigzag can be used on medium to heavyweight fabrics.
Method:
1. Press the seam allowance open.
2. Stitch over the edge with a multi-zigzag stitch set at a medium width (Figure 16).
3. Adjust the machine so that rolled edges and puckered stitches are avoided. Soft fabrics may need to be zigzagged 1/4 to 1/8 inch (6-3 mm.) from the raw edge and trimmed close to the zigzag stitching.

HONG KONG FINISH
A Hong Kong finish may be used in medium to heavyweight fabrics, and along the edge of the neckline and hem facings. It is also used on seams in unlined jackets.
Method:
1. Press the seam allowance open.
2. Cut 1 inch (2.5 cm.) bias strips from lightweight fabric.
3. Place the bias strips and seam allowance, right sides together, and stitch 1/4 inch (6 mm.) from the raw edge (Figure 17).
4. Fold the bias strip over the raw edge to the underside of the raw edge and “stitch-in-the-ditch” (the ridge of the first stitching line) (Figure 18).
5. Trim the loose edge of the bias close to the stitches.
SPECIAL SEAMS

These seams may be used for decoration or because they enclose the raw edges of the seam allowances.

TOPSTITCH SEAM

Topstitching is sometimes functional, but usually purely decorative. It can be used on any weight of fabric provided the seams and extra stitchings do not pucker. Topstitching is more decorative if stitched with polyester topstitching thread or if two strands of regular sewing thread are used. If the sewing machine has two spool pins, use two spools of thread. If it has only one spool pin, fill an extra bobbin with thread and place it under the spool of thread on the pin. If you are using a long spool of thread, fill two bobbins and place them, one on top of the other, on the pin. Thread the machine and needle, pulling the two threads through as one. A larger needle may be needed.

Method:
1. Increase the stitch length, especially if the topstitching is to be decorative. However, this depends on the fabric, thread and desired effect.
2. Sew from the right side of the fabric.
3. Follow the pattern guide for topstitching placement. If the seam allowances are pressed open, topstitching is usually done on both sides of the seam line. However, if pressed to one side, only one line of topstitching is used (Figure 21).

BOUND EDGE FINISH

Bindings may be used on heavy, bulky fabrics and to finish the seams in unlined jackets.

Method:
1. Press the seam allowance open.
2. Press double fold bias tape or fold-over stretch lace over the raw edge of the seam allowance, with the wider edge of the tape underneath.
3. Machine stitch along the fold from the top side (Figure 19).

“Seam Saver” and “Seams Great” are two lightweight knit products for binding seams. They may be used on medium weight fabrics as well as heavier ones, and they have no raw edges to turn under. Pull the knitted tape slightly so that it curls around the raw edge of the seam allowance and machine stitch along the edge of the tape catching both sides.

SELF-BOUND FINISH

The self-bound finish may be used on light to medium weight fabrics.

Method:
1. Trim one seam allowance to an 1/8 or 1/4 inch (3-6 mm.) width.
2. Turn the other seam allowance in 1/8 inch (3 mm.) and press.
3. Turn and press the folded edge over the trimmed edge.
4. Stitch along the fold, encasing the raw edges of both seam allowances (Figure 20).
WELT SEAM
The welt seam does not enclose the raw edges as a flat felled seam does, but it is less bulky and holds the seam allowances in place on the wrong side of the garment. It is also used on medium weight fabrics which do not pucker.
Method:
1. Stitch a plain seam, right sides together.
2. Press the seam allowances open and then to one side.
3. On the right side, topstitch 1/4 inch (6 mm.) from the seam through the garment and seam allowances (Figure 22).
4. The inner seam allowance may be trimmed to 1/4 inch (6 mm.) before topstitching, to eliminate bulk.

FLAT FELLED SEAMS
This enclosed seam is used on light to medium weight fabrics which do not pucker. It is often used on sportswear and on garments that are laundered frequently. This seam is easy to use on straight and slightly curved edges. An armhole seam can be felled only if the top of the sleeve contains little or no ease such as in a man’s shirt.
Method:
1. Stitch a plain seam with the wrong sides together.
2. Press the seam allowances open and then to one side.
3. Trim the lower seam allowance to 1/8 inch (3 mm.) (Figure 23)
4. Fold the edge of the upper seam allowance under 1/4 inch (6 mm.) and press over the trimmed seam allowance.
5. Machine stitch along the fold, through all thicknesses (Figure 24).

DOUBLE WELT OR SIMULATED FLAT FELLED SEAMS
This seam is easier to handle at corners and curves than the flat felled seam, but it is not finished on the wrong side.
Method:
1. Stitch a welt seam.
2. On the right side, make a second row of topstitching along the seam line (Figure 25).

FRENCH SEAM
This enclosed seam is used on sheer or light weight fabrics when a couture look is desired. It works well on straight seams, but is difficult on curves.
Method:
1. Stitch a 3/8 inch (1 cm.) seam with the wrong sides together. A 7/16 inch seam may be sewn in very fine fabrics.
2. Trim the seam allowance to 1/8 inch (3 mm.) or slightly narrower in fine fabrics (Figure 26).
3. Press the seam allowance open.
4. Fold the fabric over the seam allowance with the right sides together, so that the first stitching is on the fold. Press.
5. Make a second stitching 1/4 inch (6 mm.) or narrower from the fold, encasing the raw edges (Figure 27).
MOCK OR SIMULATED FRENCH SEAM
These seams are easier than regular French seams when sewing around a curve, but they may be more time consuming.

**Method:**
1. Stitch a plain seam and press the seam allowances together.
2. Turn in the raw edges of each seam allowance and hand or machine stitch the seam allowances together along these folds (Figure 28). For a narrower seam, trim the seam allowances to 1/2 or 3/8 inch (1.3-1 cm.) before turning in the edges.

LAPPED SEAM
Lapped seams are used on natural or synthetic leather and suede fabrics which do not ravel. They have an appearance similar to flat felled seams.

**Method:**
1. Trim away the full width of one seam allowance. Preplanning is necessary so that comparable seams are trimmed and lapped in the same direction. For example, both side seam allowances may be trimmed from the front sections and lapped over the back sections.
2. Place the trimmed edge along the seam line of the right side of the corresponding section. Glue or use basting tape to hold these edges together.
3. Stitch along the trimmed edge through both layers.
4. Make a second topstitching 1/4 inch (6 mm.) from the first stitching (Figure 29).

TO REDUCE PUCKERING
If the seam line puckers, reduce or hopefully eliminate this puckering by one or several of these techniques:
- Stitch using long staple polyester or cotton-wrapped polyester thread.
- Use a needle designed for sewing on polyesters and hard-to-sew fabrics. Check with the sewing machine dealer to learn the best type of needle for your machine and fabric.
- Stitching the seam as few times as possible. Plain seams with zigzagged seam allowances will pucker less than flat felled seams.
- Hold fabric taut as you sew. When stitching, hold the fabric taut in front and back of the needle.
- Use the machine throat plate with the small round hole for straight stitching. If the machine does not have interchangeable throat plates, cover the large oval hole with transparent tape and allow the needle to pierce only a small hole. Another option is to move the needle to one side of the throat plate using the right or left needle position. Since you have changed the needle position, correct the seam guide so that the seam allowance is the proper width.
- Loosen the tension on both the top and bobbin threads. A loose but balanced stitch has less tendency to pucker than a tight stitch.
- Adjust the stitch length. Usually a slightly longer stitch will pucker less than a short stitch.
- Stitch with a slow, even speed. Fast stitching as well as uneven speed tends to increase puckering.

**REFERENCES**
Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may be similar. Persons using such products assume responsibility for their use in accordance with current directions of the manufacturer.

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