Precise Piecing - Techniques

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Fabric Preparation

- I don't prewash if I'm using pre-cut fabrics
- I do prewash large pieces I'm going to use for backing after serging the raw cut edges
- If the block you're making will require sewing bias edges, I press with Best Press (or some other spray starch). The crisper the fabric the sharper the cut.

Cutting

- Always measure with your ruler (not the lines on the cutting mat)
- A slotted grid is a wonderful tool for cutting strips, squares, diamonds, etc. The slots guarantee the strips are a uniform width
- Never cut more than 2 layers of fabric when making precise cuts using a regular cutting ruler; if you're using a slotted ruler you can cut 4 layers successfully
- Make sure your rotary blade is sharp
- Use a quality rotary cutter - Make sure you're using a decent rotary cutter; some cheaper ones result in your blade wobbling a bit when you cut even when the blade is sharp.
- Make sure your rulers are precise – on cheaper rulers, I've noticed one edge might not be an exact $\frac{1}{4}$"

Pin or not to pin

- I generally don't pin
- I do pin if
    - your nested seams don't quite align exactly - pinning will let you fudge the matching
    - you're joining diagonal seams
    - you're sewing long pieced strips together - to match joins along the way
- Pins should be inserted perpendicular to the seam to avoid fabric shift
- Sometimes it's helpful to pin either side of a join
- Alignment of points is priority number 1; not stretching your fabric and maintaining an exact $\frac{1}{4}$" seam allowance is second.
- It's OK to fudge! Pinning helps with the fudging. Once the seam is pressed, the fudging will not show

Types of Intersections

- **Squares:** Square joins occur when you're sewing squares or rectangles - where 90° angles come together; these are nested seams, the two seams being joined should be pressed in opposing directions for the nest to be as tight as possible
- **Points:** are characterized by an intersection that occurs $\frac{1}{4}$" away from the actual block edge. It's helpful to use a pin to locate the precise intersection; the key to sewing points is to sew just beyond point to allow for pressing the seam open

- **Diamonds:** Diamond intersections are tricky - they're formed when 4 different pieces come together at a non-90° angle; it's helpful to use a pin through the join position to make sure the seams are aligning accurately

- **Curves:** Blocks like **Drunkard's Path** require you to sew two opposing curves. I pin the centre, then both ends (that's it). If the curves are cut properly you will be able to ease the curves together as you sew slowly. The mismatch will occur as you're finishing the seam - the "pie" and "L" elements won't align perfectly most of the time. Here's where you want to make the block at least $\frac{1}{4}$" larger than the desired size - that will give you fabric to trim. Make sure the beginning and end of the curves are precisely the same when you're finished trimming, otherwise the "circles" you want to match up won't be precise.

Alignment Techniques
- **Nesting:** When seams to be joined are going in the same direction, you want to nest the seam - that means making sure the two seams are pressed in opposite directions
- **"Hang-pin":** Take a straight p9in and poke it first through the top piece from the wrong side precisely through the point where two or more fabrics come together; then thread the pin through the bottom point from the right side through the point; then push the two pieces of fabric together along the pin until they're exactly against one another, now pin the two pieces together
- **Dog-Ears:** Dog-ears are useful as a visual alignment marker that can make alignment easier; This works well with a 60° intersection (often used in diamonds) if you've left the dog-ears on. Dog ears can also be helpful with chevron intersections
- **Curved joins:** To sew curved seams in quilting, align the centre points of both pieces and at the ends, then pin or use a glue stick at key points along the curve. Sew slowly, keeping the concave piece on top to make it easier to see and control puckers, and gently guide the fabric with your hands. Use your sewing machine's "needle down" feature and lift the presser foot as needed to pivot and ease the fabric, ensuring a consistent quarter-inch seam allowance and a smooth final curve.

Sewing
- Use a good cotton 50wt thread - it's much less stretchy than polyester; this can affect your $\frac{1}{4}$" precision
- Mark the "scant" $\frac{1}{4}$" position from the needle on your machine bed - when sewing that $\frac{1}{4}$" seam your eye should be guiding the fabric ahead of the needle! You should NOT be looking at the needle. Some blue or green painters tape works well. Use a small ruler (preferable transparent) to position the tape
- A $\frac{1}{4}$" quilting foot with a right guide is also helpful to keep your $\frac{1}{4}$" seam accurate
- Sew at a speed that's comfortable for you
- Sewing is like driving a car: you slow up when you come to intersections! You can speed up if you have an uninterrupted straight seam
- Before sewing, you may want to test your tape placement by sewing two fabric scraps and measuring the result; adjust your guide until the finished seam measures the correct size.
- Chain-piece wherever possible

Pressing
- There are arguments for pressing seams open - but keep in mind you can't stitch-in-the-ditch afterward!

- I press seams to one side, watching the developing quilt to be sure nesting seams have the seam pressed in opposite directions.
- Press to the dark side if you can - but keep an eye on the nesting - for me, nesting takes priority
- Press the seam with the fabrics still closed, then flip one side open and press that piece to one side
- Some people swear by a dry iron; I prefer steam
- Press, don't iron! Put the iron down on the seam, a bit of steam, hold for a moment, lift, then move the iron along, then put it down again
- Use a wool pressing mat and a tailor's clapper for flat seams
- You can use either a regular iron or a craft iron; I own both but generally use my regular iron

Trimming Blocks
- In spite of your best efforts the finished blocks will still want a bit of trimming
- Press your blocks first
- Use a large square ruler with clear markings to line up the desired finished size and a 45° angle line to line up the diagonal
- Use a sharp rotary cutter to trim two sides at a time; rotate the block and trim remaining two sides
- Be careful to keep a $\frac{1}{4}$" seam allowance where points will need to intersect - this can call for some fudging
- You can get away with a block that is too small by a smidgeon - but even ⅛" may be too much and cause the quilt top to bubble; what matters is maintaining that $\frac{1}{4}$" seam allowance where points need to intersect; you can have a smidgeon less than $\frac{1}{4}$" in straight seams
- Always make Drunkard's Path blocks $\frac{1}{4}$" larger than the final block size - that lets you get away with not matching the bottom end join precisely; it takes away the anxiety about being absolutely exact!

Tools
- Slotted ruler for cutting precise strips (should have both $\frac{1}{2}$" and $\frac{3}{4}$" markings)
- Coloured transparent tape for marking common cutting positions
- Square template with clear markings including a diagonal for matching opposing corners
- 3lb or 5lb weight (to hold standard 6 x 24 cutting ruler
- 6 x 24 cutting ruler; a 4 x 14 cutting ruler
- Rotary cutter with new blade
- Good (sharp) scissors (6"-8" blades; as well as $3\frac{1}{2}$" scissors; fresh seam ripper
- $\frac{1}{2}$" piecing guide; masking tape, permanent marker
- 6" plastic ruler with both inches/cm
- Heat erasable gel pen
- Glue stick
- 1//4" presser foot (with to without rt. seam guide) Magnet seam guide
- Wool pressing mat; tailor's clapper, Best Press (spray starch)
- A good steam iron (or a craft iron)
- Aurifil or similar 50 wt thread - it's fine enough that it doesn't affect seam pressing