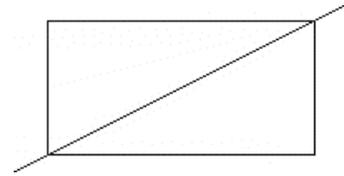


# The HRT problem:

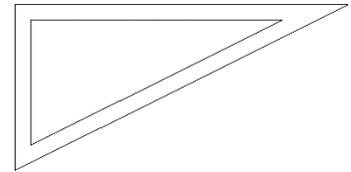
Quite often quilting designs call for rectangles pieced from Half Rectangle Triangles (HRT). An HRT is a triangle with a long skinny point that is made by cutting 2 rectangles (not squares) in half from point to point.



To make 2 HRT cut a rectangle on one diagonal

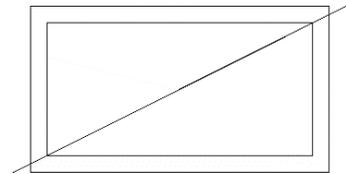
Accurately cutting an piecing rectangles from 2 HRT poses 2 challenges to the quilter:

**1. Unless the quilter is using plastic templates for cutting, the rectangles from which the quilter is to cut the HRT cannot be easily rotary cut.** For example, suppose we want a finished rectangle of 2" x 4" made from two HRT. With seam allowances added, the unfinished size for the rectangle will be 2 1/2" x 4 1/2" (1/4" seam allowances added to each side). But how big do we need to cut the rectangles that are to be cut in half to make HRTs that will be pieced together to make the 2 1/2" x 4 1/2" pieced rectangle. I won't go into the math on this one but it comes out to something close to 2 2/3" x 5 1/3". None of the rulers I have include 1/3" markings. If you round up or down then the pieced rectangle will be too big or too small and maybe some of both – one side too big and one side too small.

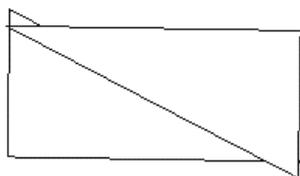
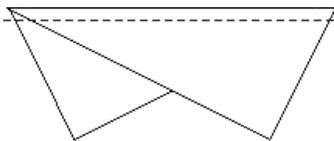


The long diagonal seam forces rectangle dimensions to a size that cannot be easily rotary cut.

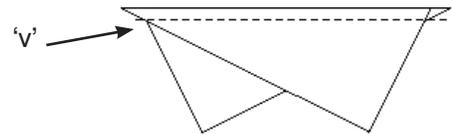
**2. It is difficult to accurately position the two HRT together for sewing.** The seamline for a rectangle pieced using 2 HRT does not go through the points of the rectangle. So the quilter has to offset the 2 rectangles at a precise and unpredictable amount. Two common methods of lining up patches for piecing will not work in this situation. The quilter cannot simply match the points of the triangles then sew. This will result in a rectangle too long and too skinny. It doesn't work to overlap the two triangles so that the 1/4" stitching line goes through the 'v' formed by the two patches. This results in a rectangle too short and too fat.



Seamline does not go through points of rectangle.



Matching triangle point to point results in rectangle too long & too skinny.



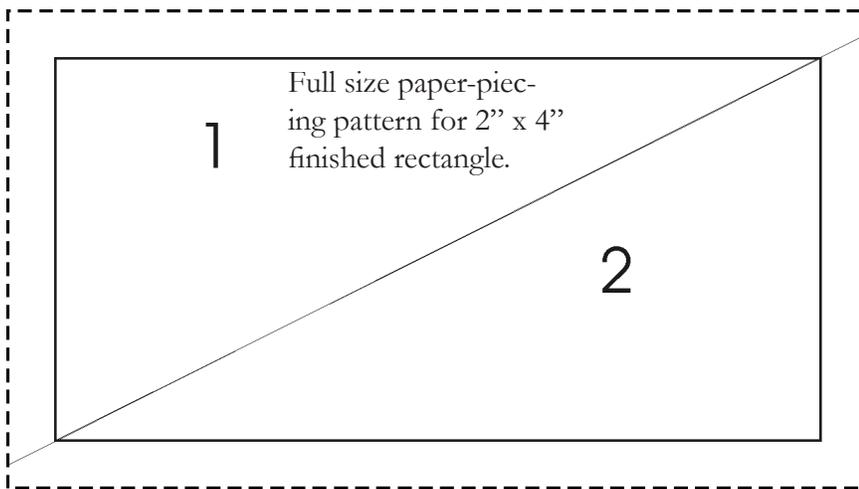
Lining up triangles so 1/4" seam goes through 'v' of triangles makes a rectangle too short & fat.

So what are the options for cutting and sewing these patches. Here are possible solutions:

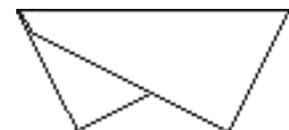
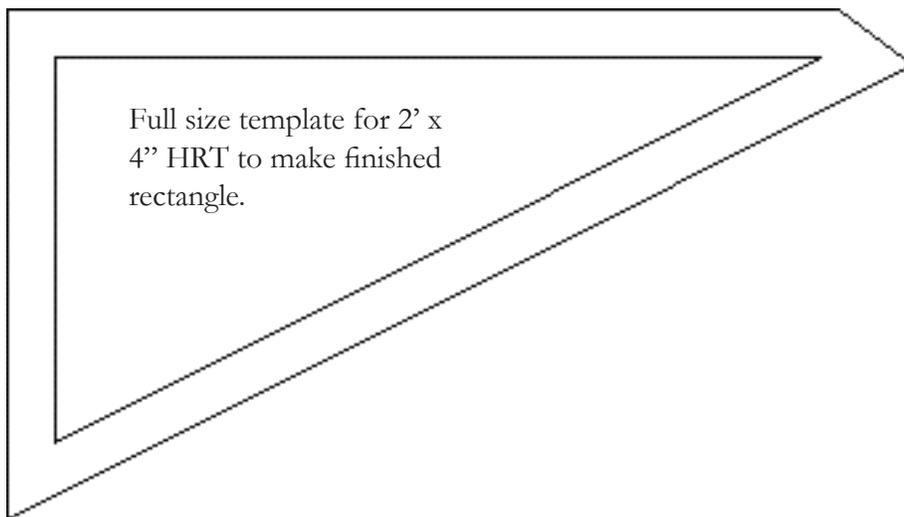
- **Option 1 : When possible use pre-manufactured templates to cut the HRTs.** There are at least a couple of good template sets on the market with the HRT template included. For our example of a finished rectangle 2" x 4" the quilter could use Marti Mitchell's Template Set D or Margaret Miller's AnglePlay Template set one – also called Angles Away. Tri-recs tools by EZ-Quilting® would work as well.

Some quilters don't have these templates so a good pattern needs to include alternatives. Here are alternatives that I have come up with, some of which I include in my patterns.

- **Option 2: Paper-piece the rectangles.** The paper-piecing pattern below makes a 2" x 4" finished rectangle. By the way.... did you know that you can reuse a paper-piecing pattern. See my book, *Painless Paper-Piecing* for information on how to reuse your paper pattern – you don't sew through the paper– and other great time saving paper-piecing techniques. <http://www.PainlessPaperPiecing.com> .

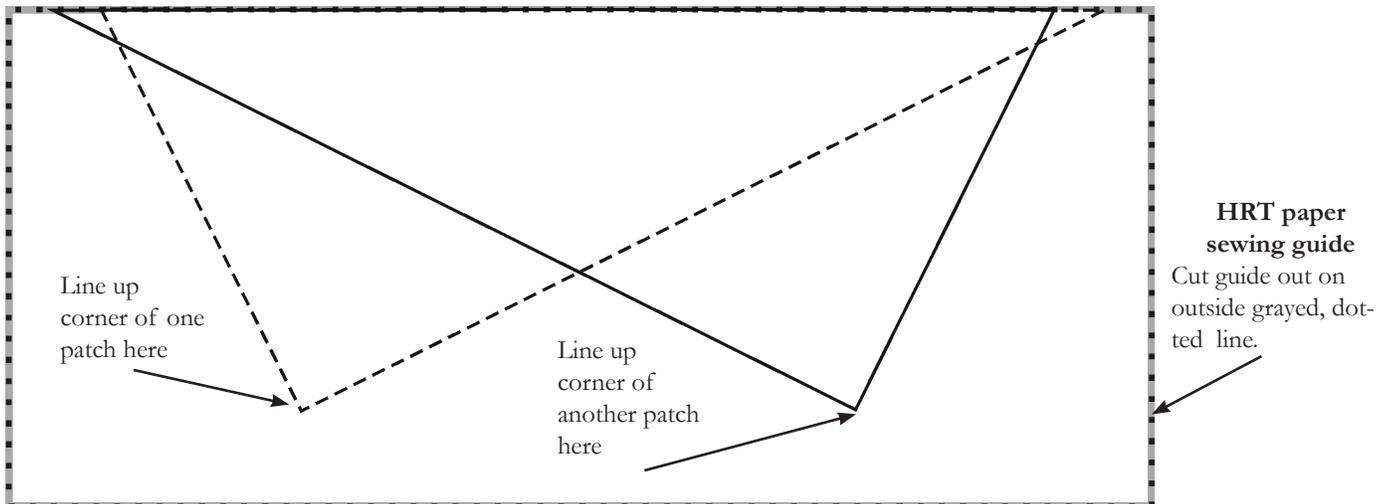


- **Option 3: Make a paper template for the HRT triangle.** This template includes a cut off triangle point that helps when lining up the patches before sewing. Cut fabric HRT exactly this size.



Easy to line up triangles before sewing.

- **Option 4: Use a paper sewing guide to position rectangles and to define sewing line.**



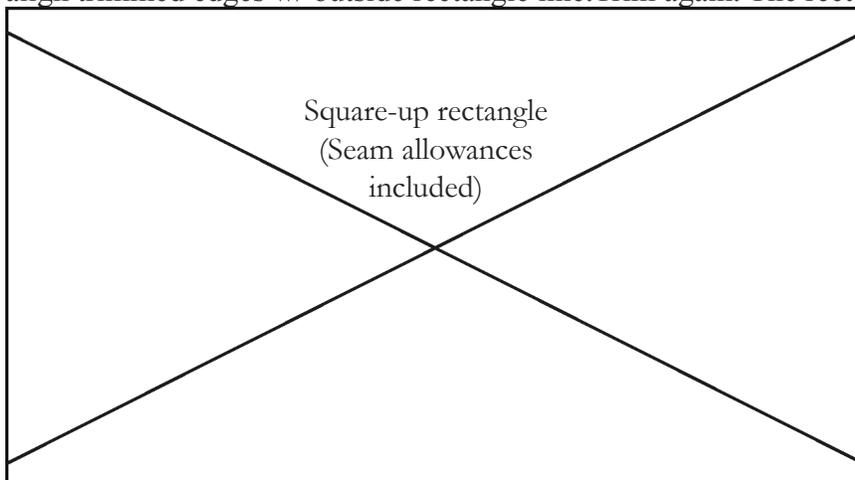
To use guide: Cut fabric HRT from 2 3/4" x 5 1/2" rectangles. Position patches right sides together, over patch outlines. Patches will extend above the patch outlines by at least 1/4". Pin to paper with flowerhead pins (or better yet use RESTICKABLE glue stick or tape on the paper before positioning patches). Turn paper over and stitch next to edge of paper. Trim seam to 1/4" if desired. Remove pins and press. Rectangle should measure 2-1/2" x 4-1/2".

- **Option 5: Cut oversize HRT and 'square up' pieced rectangle after sewing.**

Cut rectangles 3" x 6". Stitch rectangles together. Accurate alignment is not required so if the rectangle is a little too long, a little too short, too skinny or too fat it is OK.

Cut out paper 'square up' rectangle template below. Cut template in half through solid diagonal line. Using a small, 6" or 6-1/2" square ruler, lightly tape one of the paper triangles to the back of the ruler so that the squared corner of the triangle is aligned with a corner of the ruler. Securely tape the second paper triangle to the back of the ruler so that the 2 paper triangles form a 2-1/2" x 4-1/2" rectangle. Remove the first paper triangle.

Place the ruler over the pieced fabric rectangle so that the edge of the paper triangle is lined up with the seamline of the rectangle. The outside edges of the rectangle should extend slightly beyond the edges of the ruler and the edges of the paper triangle. Trim. Rotate the fabric rectangle, align as before but this time also align trimmed edges w/ outside rectangle line. Trim again. The rectangle should measure 2-1/2" x 4-1/2".



**Tip!** I've been using Glad Press-n-seal to temporarily mark my rotary cutting rulers for special projects such as this. Cut off a piece of Press-n-Seal larger than the piece you want to mark on the ruler and press to the BACK of the ruler. Trim any excess. With the Press-n-seal side up position the ruler over this square up rectangle. Draw the lines of the rectangle onto the Press-n-Seal with a Sharpie pen. When you turn the ruler over you can see the lines on the Press-n-Seal and still be able to see through to the fabric.