

### GENERAL INFORMATION

The Kaleidoscope Quilt was designed by Judy and Brad Niemeyer to show the possibilities of mixing and matching our 22" diamonds to create an exploded star quilt layout. The project requires (24) diamond blocks. We chose the Basket Star and Woven star for this design. We are also introducing a paper pieced background block in this layout. The quilt requires paper piecing and traditional piecing skills, including curved piecing, to complete.

Once you've finished this quilt, we recommend checking out Quiltster to see a variety of other diamond blocks that could be used to create this design. Likewise, if you would like to expand it, there is a border option that will take this pattern to 80" x 80" and one that will extend the design to 99" x 99". Quiltster will give you yardage and an image of your expanded design. It also gives you border options, so there is more than one expansion option to increase the size of your quilt.

**Newsprint:** The foundation papers, templates, and Template Layout Sheets are printed on newsprint. Newsprint is lightweight and tears away from your stitches without damaging the threads. This pattern has been packaged with enough papers to complete one 68" x 38" quilt. Use the list below to sort and verify that your pattern was packaged with the correct papers. The NP-# (or TP-#) is printed along the edge of each page.

- |          |         |          |         |
|----------|---------|----------|---------|
| • NP 628 | 2 pages | • NP 635 | 2 Pages |
| • TP 399 | 1 Page  | • TP 450 | 1 Page  |
| • TP 400 | 1 Page  | • TP 451 | 1 Page  |
| • NP 602 | 4 pages | • LP 037 | 1 Page  |
| • TP 406 | 2 page  |          |         |

**Corrections:** If corrections are needed for this pattern after publication, they will be listed on the Quiltworx webpage at <http://www.quiltworx.com>. Click on Products: Corrections and scroll through the alphabetical list. Or, visit the pattern page under Products and find the right column of the page to see if there is a "Corrections" list. Scanning the code to the right will take you straight to the website pattern page. Check the print date on the back of this pattern. If the corrections are dated before your print date, your pattern is up to date! If there are no corrections listed, no errors have been identified in your pattern! If you run across something you think may be an error, please let us know and we will either post a correction or clarify the issue for you.



### SUPPLY LIST

**General Supply List:** Steam iron, ironing board, medium size cutting board, 6" by 24" ruler, small scissors, rotary cutter, seam ripper, and a sewing machine with a quarter-inch foot. **We also recommend the 12" Wave Ruler by Creative Grids and Judy Niemeyer.**

**Paper Piecing Supply List:** 12 or 18" **Add-A-Quarter** ruler, Scotch tape, washout fabric pen, a fold template, flower pins, large Ziploc bags, a Purple Thang, size 70 sewing needles, and a high-quality cotton thread. Other handy items used to keep your templates, fabrics, and papers organized are paper clips and binder clips.

**Ziploc Storage Bags:** You will need bags, size one gallon, to stay organized when cutting the papers and fabrics for this quilt.

**NOTE - Classes with Instructors:** Be sure to check with your instructor if you are taking a class. Sometimes their supply lists are specific to their teaching program and vary from the recommendations above.

### DEFINITION COMMON TOOLS AND TERMS

**Purple Thang:** A small plastic tool used like a stiletto that does not poke through the fabric. It is used to guide the fabric between the presser foot and feed dogs when sewing over several layers of stacked seams.

**Add-A-Quarter Ruler:** A small ruler with a quarter-inch lip on the bottom side used to trim the quarter-inch seams for Foundation Paper piecing. These can be purchased in three (3) sizes: 6", 12", and 18" rulers. It is our recommendation you purchase the 18" ruler for this pattern.

**Washout Fabric Glue Stic and Glue Pen:** I use a water soluble glue stic to adhere the first piece of fabric to the backside of the foundation paper. We use the glue pen to temporarily glue the raw edges together before sewing any long straight or curved seams.

**Flower Pins:** Flower pins are a long pin with a flat flower glued to the head of each pin. The flower is flat so the paper can easily be folded back over the pin and still lay flat.

**Fold Template:** A flat piece of template plastic used as a straight edge while folding back the foundation papers just before trimming with the **Add-A-Quarter** ruler. A 3" by 12" piece of template plastic should be cut to use with the 12" **Add-A-Quarter**. A 3-1/2" by 18" piece is cut for the 18" ruler.

**Sewing Lines on the Foundation Papers:** You will find the sew lines on each foundation unit labeled as Sew Line 1, Sew Line 2, 3, and 4. The lines are marked in numerical order.

**Dashed Lines on the Foundation Paper:** These lines are reference lines marking the edge of your 1/4" seam allowance. They are not sewing lines. The dashed lines when sewing are lined up with the raw edges on the strips.

**Sew-Sides:** The sew-side on each piece of fabric is the first seam sewn onto the foundation paper. The sew-side on every piece of fabric you sew onto the foundation paper will always line up with the trimmed quarter-inch seam along the folded edge of the foundation paper.

**Right Side of the Paper:** The side with all the printing, also referred to as the front side.

► **Fabric AL1: Temp AL-1**

**Step 1:** Cut (1) 3" by 42" strip and place, facing *right-side up*.

**Step 2:** The *Unit AL Template AL-1* is used to cut (8) pieces, matching the size and shape of the Template.

**Step 3:** Clip the (8) pieces together and place into Bag #AL1.



**Step 1:** Cut (1), (2), or (3) 2" x 42" strips from each fabric. If you have more than one, stack them, and place them all facing *right-side-up*.

**Step 2:** Use the appropriate template with the appropriate fabric, place them on the fabric, then cut (8) pieces the same size as the Template.

- Temp AL-2, (1) 2" x 42" strip, Fabric AL2



- Temp AL-3, (2) 2" x 42" strips, Fabric AL3



- Temp AL-4, (2) 2" x 42" strips, Fabric AL4



- Temp AL-5, (2) 2" x 42" strips, Fabric AL5



- Temp AL-6, (2) 2" x 42" strips, Fabric AL6



- Temp AL-7, (2) 2" x 42" strips, Fabric AL7



- Temp AL-8, (2) 2" x 42" strips, Fabric AL8



- Temp AL-9, (2) 2" x 42" strips, Fabric AL9



- Temp AL-10, (2) 2" x 42" strips, Fabric AL10



- Temp AL-11, (3) 2" x 42" strips, Fabric AL11



**Step 3:** Clip the stacks together and place into Bag #AL1.

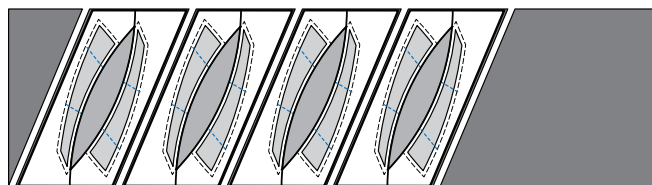
► **Fabric AL12: Temp AL-12 LS #1**

**Step 1:** Cut (1) 12-1/4" by 42" strip and place, facing *wrong-side up*.



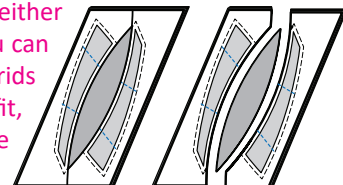
**Step 2:** The *Unit AL Template AL-12 Layout Sheet #1* is used to

cut (4) pieces, matching the size and shape of the (TLS). Reposition the template for each additional cut.



The (4) pieces are stacked *wrong-side-up* under the (TLS). A paper clip is used to clip each section to the fabric. The cutting is completed by slicing through the paper on each cut line.

Since it is a curved line, you either need to freehand the cut, or you can purchase the 12" Creative Grids Wave Ruler. It's not a perfect fit, but it's very close and will give you a nice curved edge to cut against. Simply adjust the ruler as you move around the curve to stay on the cut line. It is recommended to cut on Line 1, until just before reaching the end. Then, switch and cut on Cut Line 2. Return and finish Cut Line 1 when Cut Line 2 is complete.



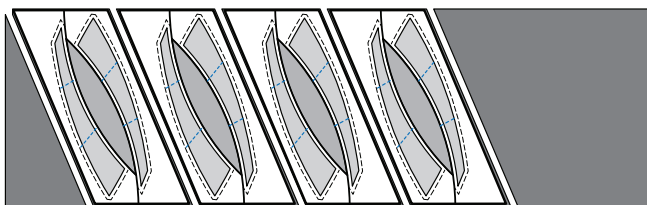
**Step 3:** Reference the *Sewing The TRP Lines* Section before placing these pieces in Bag #AL1.

► **Fabric AL13: Temp AL-13 LS #2**

**Step 1:** Cut (1) 13-1/2" by 42" strip and place, facing *wrong-side up*.



**Step 2:** The *Unit AL Template AL-13 Layout Sheet #2* is used to cut (4) pieces, matching the size and shape of the (TLS). Reposition the template for each additional cut.



**Step 3:** The (4) pieces are stacked *wrong-side-up* under the (TLS). A paper clip is used to clip each section to the fabric. The cutting is completed by slicing through the paper on each cut line. Use the same technique as described for TLS #1, to manage cutting along the curved cut lines.

**Step 4:** Reference the *Sewing The TRP Lines* Section before placing these pieces in Bag #AL1.

## CURVED PAPER PIECING: UNIT AL (TEMPS AL-12 AND AL13), BAG #AL

**Step 1:** If you have not sewn the basting stitches on the AL-12 and AL-13 sections, do so now.

**Step 2:** Remove the paper from the fabric pieces cut with *Temp AL-12 and AL-13*.



**Step 3:** Set your stitch length at about 2.8 and on Unit AL, sew a basting stitch on the curved dashed line marked *Basting Stitch Line 11*.

**Step 4:** Fold the paper back along the edge of the Basting Stitch Line 11 as shown.

**Step 5:** Trim off the excess fabric as shown.

**Step 6:** Flip the paper over and position each unit *fabric-side-up*.

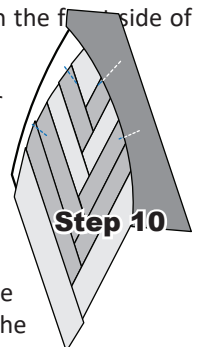
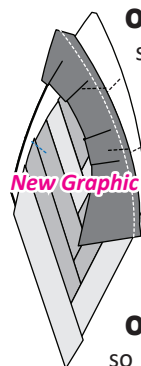
**Step 7:** Position the fabric for Sec. 12 (Temp AL-12) facing *wrong-side-up*. Match and pin the [TRP] lines. Use your glue pen and run a small strip of glue (about 1/8" wide) on the fabric along the edge of the *Basting Stitch Line*. Glue the edge of the Temp AL-12 piece along the Basting Stitches, matching the TRP lines as you go.

**Step 8:** Once the strip is in place, the fabric is pressed with steam along the edges. This helps flatten the fabric along the seam area to prevent puckering when sewing the seam.

**Step 9:** We have provided you with two different sewing options on how to complete the curved piecing.

**Option 1:** The curved seam is completed when stitching a 1/4" seam allowance, by lining the edge of your quarter-inch foot up with the basting line. [Fabric Side Up]. This technique is very much the same as sewing a normal curved seam. After the seam is sewn, flip the paper over and check for accuracy. Your stitching line should match up with the sew line labeled as Line 2 on the *front* side of the foundation paper.

**Option 2:** The paper is flipped over so you are sewing, paper-side-up) and a curved seam is completed by stitching a 1/4" seam allowance on Line 2. If you use choose Option 2, be a little cautious about how you handle your paper, otherwise you may end up with tiny puckers. To avoid the pucker, hold the paper just off the surface of the sewing machine when stitching on the sew line. This allows the fabric to feed evenly between the presser foot and the feed dogs.



**Step 3:** Fold the paper back over the top of the fold template.

**Step 4:** Place the *Add-A-Quarter* ruler next to the folded paper and trim the fabric with your rotary cutter.

**Step 5:** Place the fabric piece for Sec. 2, *right-side up* next to the folded back paper.

**Step 6:** Lift the paper, and slide the fabric under Sec. 1, line the sew-side up with the trimmed seam allowance. Repeat *Steps 1-6* for each foundation paper before moving onto Step 7.

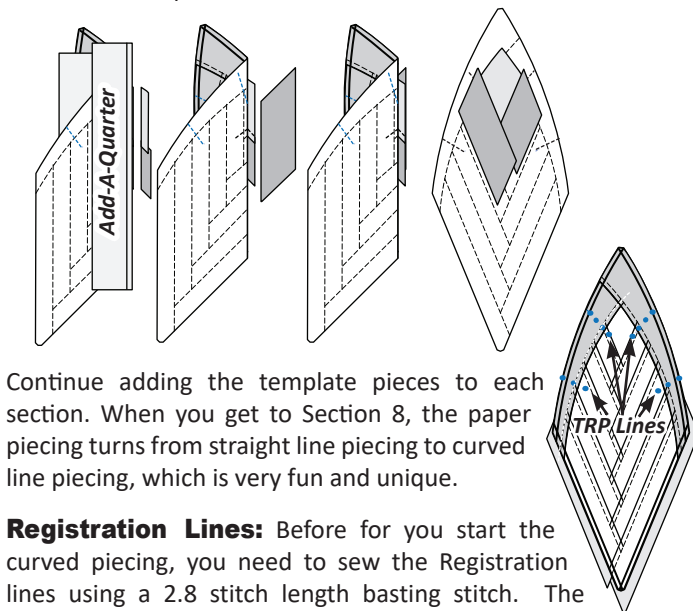
**Step 7:** Sew on Line 1. The stitches should start and stop about 1/8" past the beginning and the end of each stitch line. Complete the sewing on each Unit before moving onto the next step.

**NOTE - Trimming the Threads:** Sewing past the ends of your sew line makes it possible to cut the thread ends off each time you trim with your *Add-A-Quarter* ruler.

**Step 8:** Loosen the glue under Sec. 2, then press the fabric pieces open on the backside of each paper.

**Step 9:** Position the fold template over the top of Sections 1 and 2, lining the edge up with Line 2. Fold the paper back and tear the paper along the stitches on Line 1. Stop tearing when you hit the fold template.

**Repeat Step 4-8:** Trim the fabric with the *Add-A-Quarter* ruler. Position the third fabric piece *right-side-up* next to the paper. Lift the paper and slide the fabric under Sec. 3 in position. Open the paper, sew on Line 2 and press.



Continue adding the template pieces to each section. When you get to Section 8, the paper piecing turns from straight line piecing to curved line piecing, which is very fun and unique.

**Registration Lines:** Before for you start the curved piecing, you need to sew the Registration lines using a 2.8 stitch length basting stitch. The graphic to the right demonstrates the basting stitches to sew.



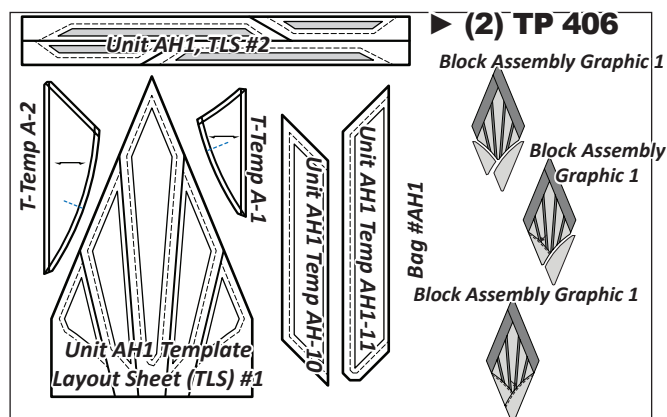
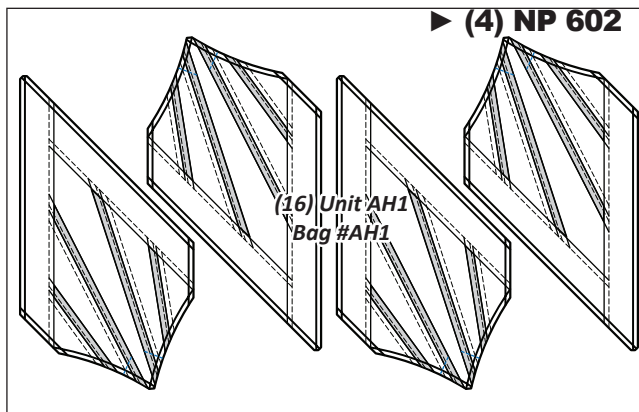
## BASKET STAR, UNIT AH1 INSTRUCTIONS, GROUP A, ROUND B

**Ziploc Storage Bags:** You will need (1) bag to complete the organization for these instructions.

- Bag #AH1: (16) Unit AH1 and associated Templates

### ► Preparing the Foundation Papers:

Cut out (16) each Units AH1 on [NP 602] and (2) each of the Templates and Templates Layout Sheets on [TP 406]. Place the Foundation Papers and Templates into their assigned Bag #s. See the following newsprint graphics for the corresponding bag information. \*Refer back to General Information for Foundation papers and templates for additional instructions on how to prepare your foundation papers and templates.

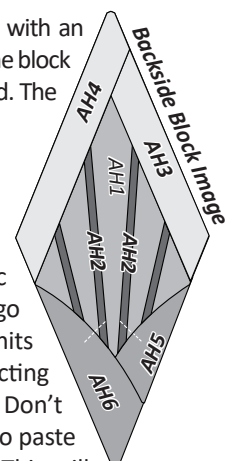


### ► Fabric Reference Information

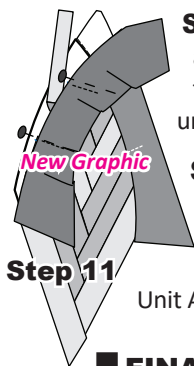
We have named all of the matching diamonds with an identifier like AA to AZ so if you put more than one block in a quilt, it will be easier to keep them organized. The Basket Star is referred to as the AH block.

### ► Color Layout and Fabric Information:

The table that follows includes yardage, fabric numbers, and a reference to which fabrics go with the templates and (TLS) to complete Units AH1. This table is your guide for not only selecting your own colors, but keeping you organized. Don't forget to cut a swatch of your chosen fabric to paste in the box in the Assigned Colors column! This will help you stay organized! The block to the left shows where fabrics go in the block. It shows the block from the backside of the quilt, as



**Step 10:** Flip the paper over, check your seam to make sure you did not sew any puckers into the strips. If it looks good, press the fabric to cover Sec. 12.



**Step 11:** Repeat Steps 4 to 10 to add the Template AL-13 pieces to Section 13 on each of the (8) units.



**Step 12:** Trim the excess fabric off around the edge of the paper (the 12" Creative Grids Ruler works great!), then remove the paper from

Unit AL.

## FINAL CURVED PIECING, T-TEMPS AL-1 AND AL-2

**Step 1:** Before sewing on the *T-Template AL-1 and AL-2* pieces, double check to make sure the TRP lines have been added.

**Step 2:** With your Template pieces marked, match and pin the *T-Template AL-1* to the foundation paper *right-sides-together*. A glue pen used to secure the edge of the fabrics along the seam allowance will help keep everything in place. Use the Smart Corners and TRP Lines to position the fabric piece perfectly.

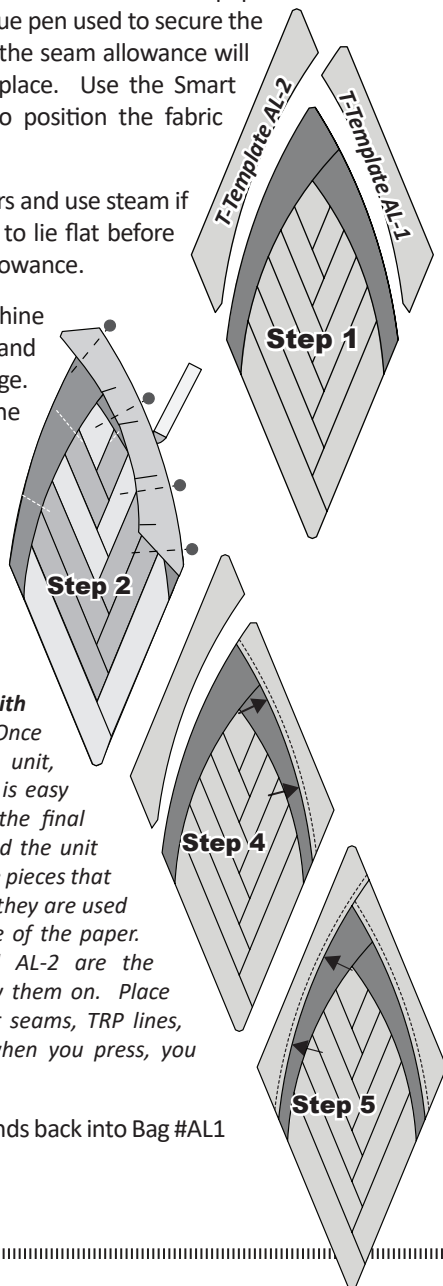
**Step 3:** Watch for puckers and use steam if needed to get the pieces to lie flat before sewing along the seam allowance.

**Step 4:** Set your machine to sew a 1/4" seam and sew along the curved edge. Press the seams toward the *T-Template AL-1* fabric.

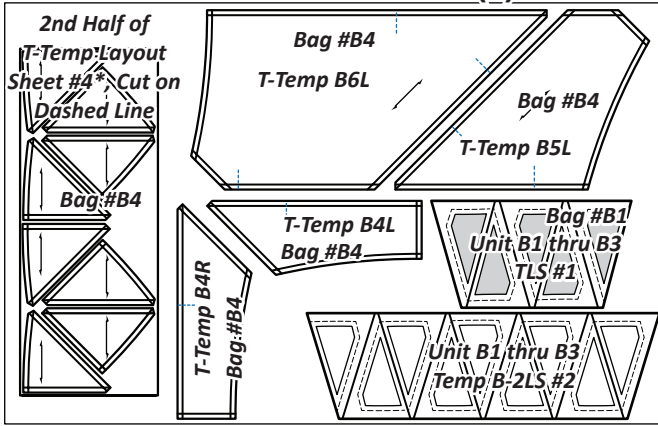
**Step 5:** Repeat this process to add *T-Template AL-2* to the other side. Press the seams towards the *T-Template AL-2* fabric.

**NOTE - Caution with Trimming Block AL:** Once you have completed this unit, DON'T TRIM ANYTHING! It is easy for paper piecers to sew the final *T-Templates* on, then flipped the unit over, and trimmed away the pieces that were just sewn on because they are used to trimming up to the edge of the paper. As *T-templates*, AL-1 and AL-2 are the perfect size before you sew them on. Place them carefully, match your seams, TRP lines, and Smart Corners, and when you press, you have completed the unit.

**Step 6:** Place the diamonds back into Bag #AL1 to await final assembly.



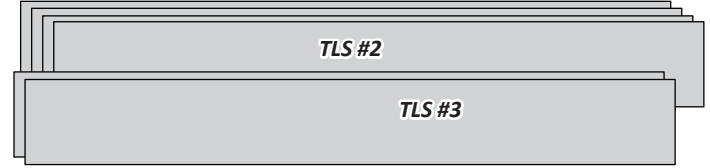
► (1) TP 451



**GROUP B CUTTING INSTRUCTIONS**

► **Fabric B1: TLS #2 and #3**

**Step 1:** Cut (6) 5-1/2" x 42" strips and place them into (1) stack of (4) and (1) stack of (2), facing *right-side up*.



**Step 2:** The *Unit B1 thru B3 TLS #2* is used to cut (8) pieces matching the size and shape of the TLS. Reposition the TLS as shown in the graphic for the second cut.



**Step 3:** The *Unit B1 & B3 TLS #3* is used to cut (8) pieces matching the size and shape of the TLS. Reposition the TLS as shown in the graphic (3) times.



**Step 4:** Restack the pieces cut with each of the TLSs into (1) stack of (8), then place the respective TLS on top.



**Step 5:** Use paper clips along each Template in each TLS to secure the paper to the fabric stack. Then, slice through the TLS and fabrics beneath on the Cut Lines, moving in numerical order to separate the templates.



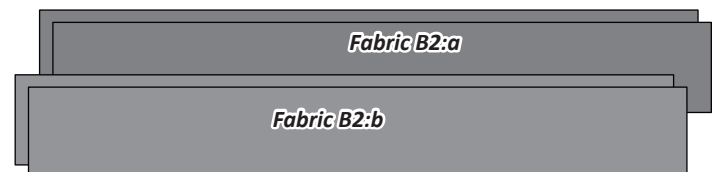
**Step 6:** Place the stacks in the following bags (Reference the graphic above as well):

- TLS #3, Sec. 1 Temp B-1 & Sec. 7 Temp B-3 go in Bag #B3.
- TLS #3, Sec. 1 Temp B-4 & Sec. 7 Temp B-5 go in Bag #B1.
- From TLS #2, place (2) Temp. B-2 Stacks in Bags #B1, (5) in Bag #B2, and (2) in Bag #B3.

► **Fabric B2:a & B2:b, TLS #1**

**Step 1:** In Bag #B1, there are (2) TLS #1. You will need (1) for Fabric B2:a and (1) for Fabric B2:b. If you are using the same fabric for B2:a and B2:b, then just stack your strips together in the following instructions and ignore the sorting information.

**Step 2:** Cut (2) 5-1/2" x 42" strips from each Fabric B2:a and B2:b. Place them into (2) stacks of (2), by color, facing *right-side up*.



► **Fabric Information: Group B**

The table below includes yardage, fabric references, and which fabrics should go with which cutting templates to complete Group B. This table is your guide for keeping you organized. Don't forget to cut a swatch of your chosen fabric to paste in the box in the Assigned Colors column! A graphical color layout is provided as well.

<b>Make (8) Units B1, B2, &amp; B3, and Cut (4) of each T-Template ~ Unit Chart</b>		
<b>GROUP-B FABRIC #</b>	<b>YARDAGE INCH</b>	<b>ASSIGNED COLOR</b>
Fabric B1 Units B1 to B3, TLS #2 & #3	1 yd or (33")	Fabric Swatch
Fabric B2:a: Units B1 to B3, TLS #1	3/8 yd or (11")	Fabric Swatch
Fabric B2:b: Units B1 to B3, TLS #1	3/8 yd or (11")	Fabric Swatch
Fabric B3: T-Temps B1 to B3 (L & R)	1/2 yd or (15")	Fabric Swatch
Fabric B4: T-Temps B4 to B6 (L & R)	1-3/4 yd or (63")	Fabric Swatch

► **Color Layout (Backside)**

