

**In-Class Projects to print out for class!**

Please print out the pages that interest you, and bring with you,  
OR have them available on a device you bring to class.



# Wedding Cake Buildings

“Wedding cake” buildings narrow as they rise (or alternate wide and narrow sections.)



## Fabric



Main color (orange here). I suggest 4" x 12" (a fat-eighth, fat-quarter, or quarter-yard will get you there). Tip: A plaid hints at lots of windows!



Use the same fabric as above, or choose scraps in similar colors, for units on top of the main building. They can be 5" wide x 3" high; 4" x 2"; 3" by 1.5"; and 2" x 1".

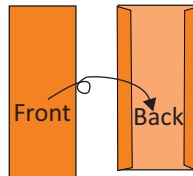


(These are not set in stone, adjust as desired!)



Option: If you want a spire, bring a 3" x 2" square of paper-backed fusible web, along with the same-size square of the fabric you want to use.

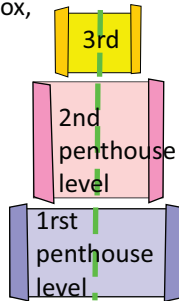
**1** Cut a tall rectangle, about 4" x 14", to serve as the main body of the skyscraper. Fold and press its two side edges inward, toward the back.



**2** Cut as many levels as you want to top your skyscraper. I'm calling everything above the main body "penthouses". Diagrams show three, in multiple colors for clarity. Cut each level at least 1" narrower than the one before. Use the measurements in the fabric box, above right.

**3** On each penthouse level, press the two side edges back 1/4".

**4** Fold and lightly press each in half (matching folded edges) to mark the centers. The green line represents these centers. (We'll add the main body last).

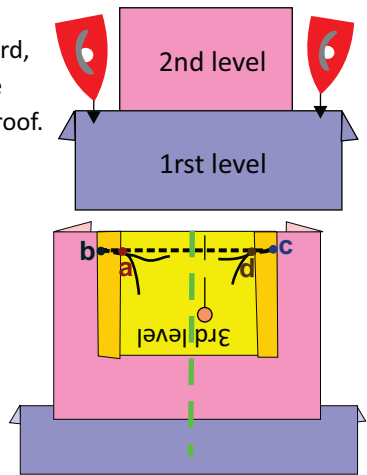


**5** Place first level, good side up, on the desk. Put the bottom edge of the second level, wrong side up, along the top. Match top edges and centers. Pin. **The side flaps on the second level must be SHUT!** (On the 1st level they can be open or shut).

**8** Press seam allowances downward, toward the wider level. Include the extended edges of the 1st floor's roof.

**9** Add the third level. Pin, rotate, and sew as in steps 4-6: Bring up threads at **a**, backstitch to **b**, stitch straight to **c**, backstitch to **d**, then cut threads.

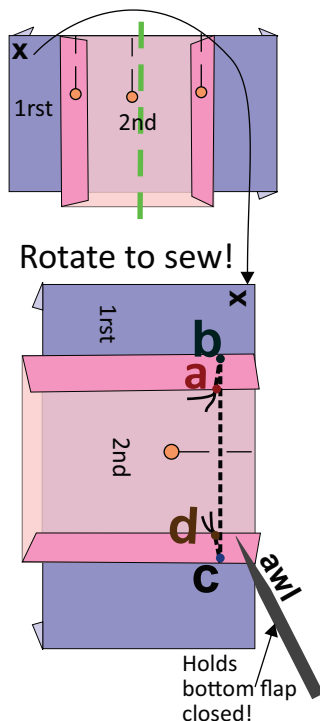
**10** Press seam allowance downward, toward the wider level, as before.



**6** Rotate everything clockwise so the pinned seam is along the right edge. You're still looking at the back of the second penthouse level.

**7** Bring up threads at the dot by **a**. Backstitch over the pink flap. Stop at **b**, just below the fold. Sew forward, over the first and last flap, to **c**. (An awl helps ease the bottom flap under the foot.) Backstitch to **d**. Cut threads.

**Backstitching secures the seam, and keeps thread tails away from edges, so they don't stick out!**

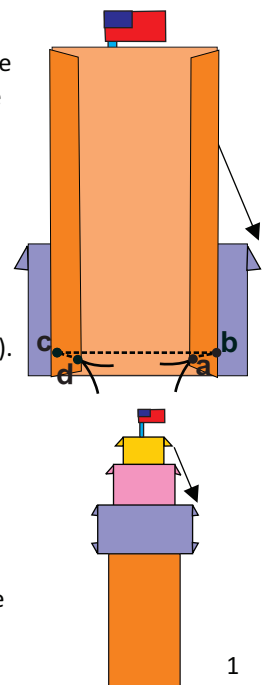


**11** Add as many penthouse levels as you want!

**12** Press top edge back 1/4". Now or later, you can create a spire, a flag, whatever you like. Tuck its base under the top fold.

**13** Add the top unit to the main skyscraper rectangle. Arrange as shown, from the back of the skyscraper. Center and pin its top edge onto the bottom edge of the 1st penthouse level. Rotate and sew as before from **a** to **b** to **c** to **d**. (The 1st penthouse level's side flaps can be open or shut for this sewing).

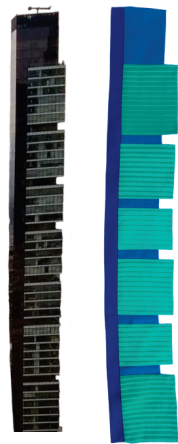
**14** Press seam allowances UPWARDS, under the widest level, which in this case means they go under the 1st penthouse level (not under the narrower main building). The building now has all but its bottom raw edge neatly turned to the back! Wait until you know exactly where it will go before dealing with that lowest edge. (You could wind up piecing it to the top of another building; or you might choose to leave it unturned if its base is also the bottom of the quilt.)



# Offset on One Side



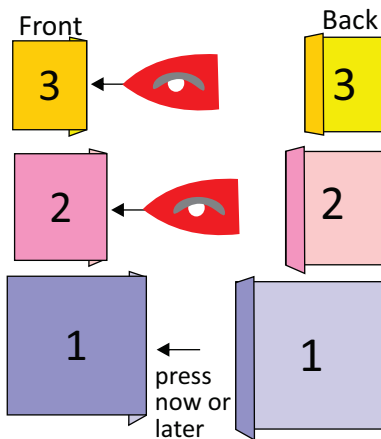
Some buildings are only crooked on one side. This technique can also be used to join buildings with different heights (see box on the right).



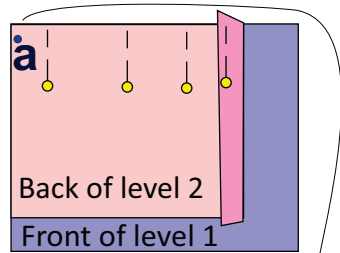
**1** Make levels any way you like. One piecing option: the left-handed tower of arches on the lower right of this page.

Or, use unpieced blocks, like a different solid color, or geometric print, on each level.

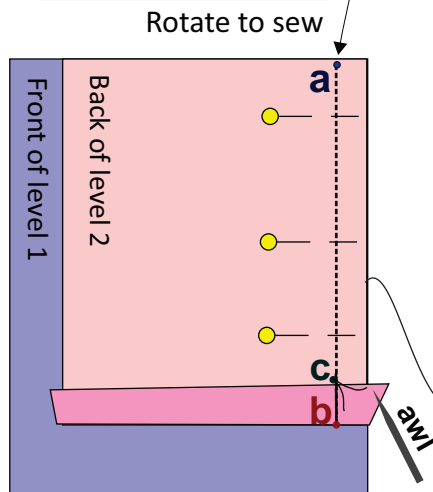
**2** Press the uneven side edge back 1/4". Here, right edges will be uneven. [On level 1, it's optional to do this now – because only that piece will NOT be attached to a wider piece. You can press its far edge at the end.]



**3** Flip level 2, face down, on level 1, face up. Align top and left edges. Pin with the flap on the right of level 2 closed.



**4** Rotate pinned edge right. Start sewing at **a** – no need to backstitch, because there's no flap there, and the top edges are even. Sew, traveling over the closed flap, past **c**, to **b**. (As the presser foot approaches **c** and **b**, an awl helps the flap go under it, staying closed.) Backstitch to **c**. Cut threads.



**5** Press extended seam allowances neatly downward under 1 (under the red irons in the drawing on the far right.)

**6** Sew Level 3 to 2 the same way.

**7** Last steps: Press the entire straight (left) edge of the building inward 1/4".

**8** Press the right edge of level 1 inward 1/4" (if you didn't do it earlier). Press top edge of Level 3 to the back 1/4", and bottom edge upwards 1/4" (unless you know that will be the bottom of the quilt, or think that the bottom edge might wind up hidden behind other buildings.)

2

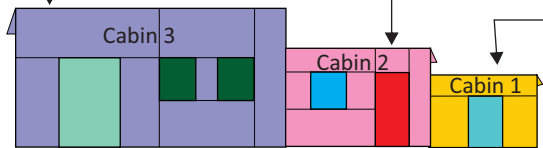
## Variations! Use this trick to:

Join buildings with different heights into rows:

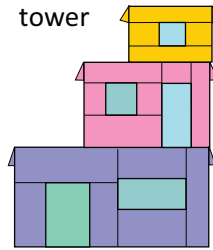
**3** Highest top edge is turned back, last.

**1** Lowest roof top is turned back 1/4" first, before sewing cabin 1 to cabin 2

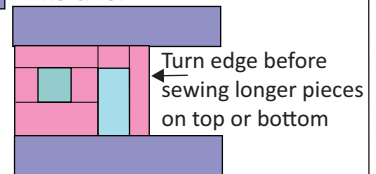
**2** 2nd lowest roof top is turned back next, before sewing cabin 2 to cabin 3



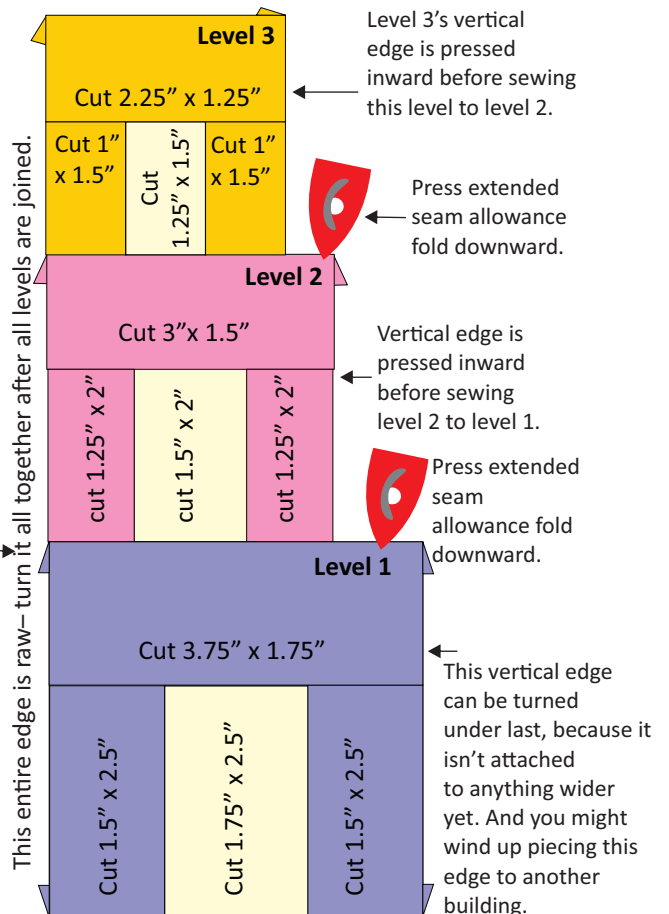
Or, make a right-handed tower



Or, make balconies or eaves See p. 40 for a structure like this.



Result: Left-Handed Tower, approx. 9" x 3.25





Left, Boston University computing & data science building



Right, 56 Leonard St., NYC.

# Zigzag Buildings

Several US cities have zigzag buildings that locals nicknamed “Jenga”™, after the game in which you pull protruding blocks from a tower. One of them, New York’s, 56 Leonard St., is on the near left. (There’s a pattern for it in my book “Quilted New York”). Boston University’s Data Science Center is on the far left.

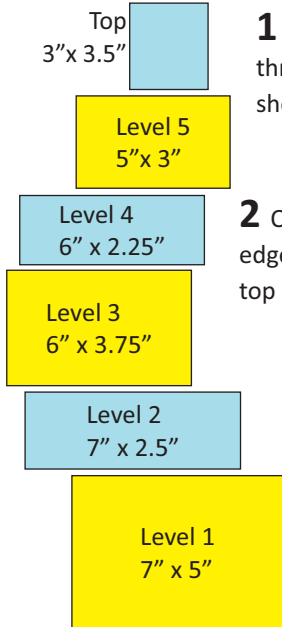
Sections that overhang others without end supports are “cantilevered.” They inspired the fantasy building on the right. Here, as in wedding cake buildings, we’ll turn edges during piecing, so you don’t have to rip seam ends afterwards. But it’s a trickier when buildings zigzag.

Because the dome is made with freezer paper applique, along with the usual sewing supplies, I use **Niagara Premium Smooth Finish Ironing Spray**, (any spray starch or sizing works), and **freezer paper**.



Finished size: Approx. 8” x 16”, depending on how much you offset the pieces!

## Cutting Diagram



**1** Cut three pieces from fabric 1 and three pieces from fabric 2 to the sizes shown here.

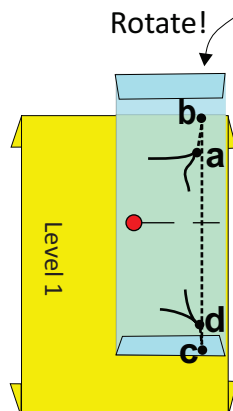
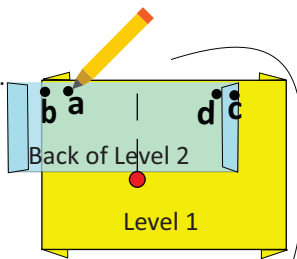
**2** On pieces 1-5, press both vertical side edges inward 1/4". Don't do this to the top piece.

**3** Arrange. This arrangement has each piece offset differently on both sides. *Improv: Center some levels, or line up some edges; refer to book sections on “Wedding Cake” or “Offset-on-One side” piecing for those floors.*

**4** Flip level 2 face down on top edge of level 1. All side flaps are pressed in. Pin. Mark a dot at **b**, where the far left fold of the hidden (yellow) piece is; and at **a**, above the hidden flap's raw edge. The two dots should be about 1/4" apart.

You do NOT need to mark dots on the other end – at **c** and **d** – because you can see those spots as you sew – the fold at **c**, and 1/4" before that, where the flap ends, at **d**. I put those dots in the diagrams just for reference.

**5** Rotate pinned edge right. Bring up threads at **a**, backstitch to **b**, sew down, over the closed flap (an awl will help you keep the flap shut), to **c**, then backstitch and cut threads at **d**.



3

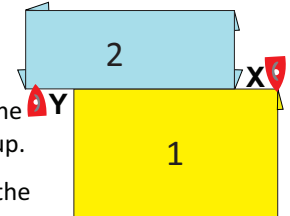
**Fabric** For the sampler quilt, I suggest they both be in the same color family

- Fabric 1 - Less than a fat-eighth or quarter-yard
- Fabric 2 - Less than a fat-eighth or quarter-yard

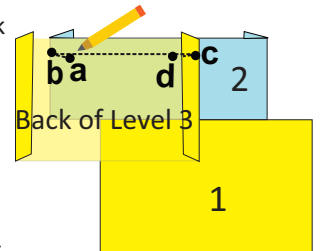
**6** Open. Press seam allowances between 1 and 2 OPEN.

Why? If you press both flaps up, the yellow raw edge at **X** would stick up.

But if you press both flaps down, the blue raw edge of the upper story, at **Y**, would protrude downward. Thus the seam demands: Press me open!

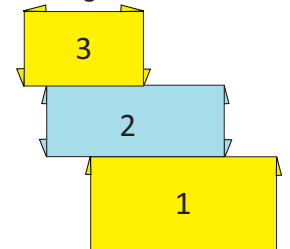


**7** Flip level 3 on top of 2. Mark dots at **a** and **b**, where the hidden (blue) layer's fold and flap end are. You do NOT have to mark **d** and **c** – this side will be up as you sew, so you can clearly see where level 3's right flap starts and ends.



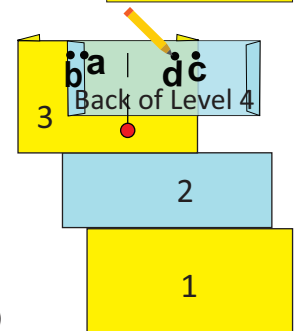
**8** As in Step 4, rotate and sew: Bring up threads at **a**, backstitch to **b**, sew to **c**, and backstitching to **d**. Press seam allowance open.

The building looks like this. All seam allowances are pressed open. Now we'll zag to the right.

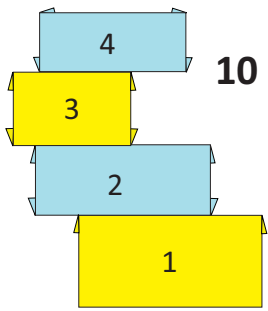


**9** Flip level 4, good side down, on the right upper edge of 3. Don't mark **a** and **b**, – you can see those spots. DO mark dots where hidden level 3's right fold is (under **c**), and 1/4" before that, at **d**.

Rotate right and sew, pulling up threads at **a**, backstitching to **b**, sewing to **c**, backstitching to **d**.

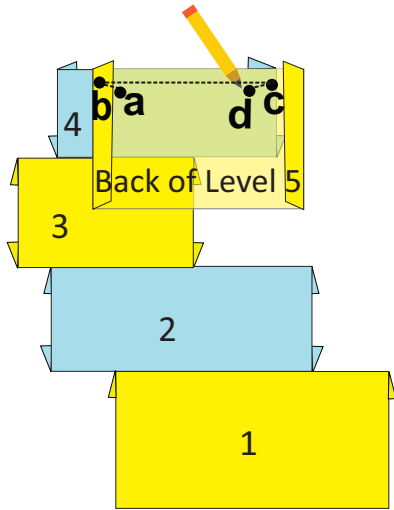


(continued)



**10** Press seam allowance open.

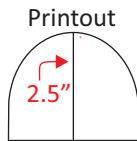
**11** Add level 5 a little more to the right. You can see the start, **a** and **b**, so you only need to mark **d** and **c**, above the hidden right flap on level 4, where level 5's left flap begins and ends. Sew. Press seam allowance open.



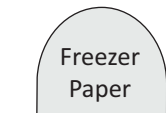
## Top it off!

**12** I topped off my building with an arch. The next steps are basically the same as for the Emerald Observatory dome on p. 42. The arch is centered on level 5, so we can use wedding cake piecing.

**13** Print out the template on this page. Do a size check: Measure its midline. It should be 2.5". (If not, change your printer settings to "print actual size.")



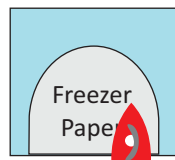
**14** Use the paper version to trace and cut a freezer paper version. (No need to trace its midline).



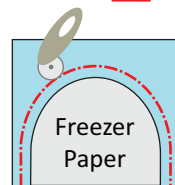
**15** Cut arch fabric to at least 3.5" x 3". (You may have cut this piece in Step 1).



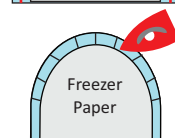
**16** Press the freezer paper pattern to the back of the dome fabric. Align the bottom edges.



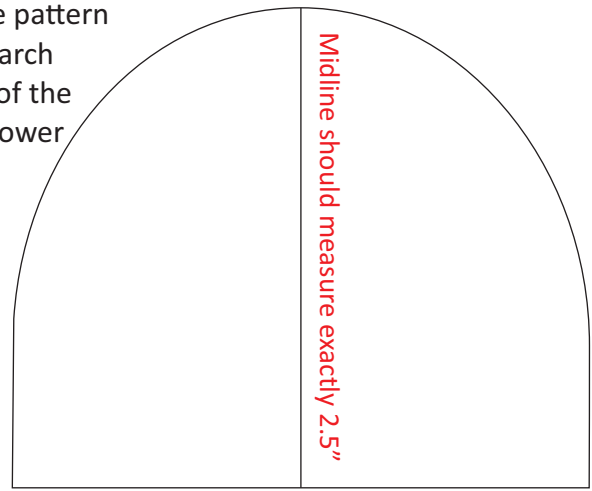
**17** Cut out around the fabric to 1/4" beyond the freezer paper template.



**18** Press raw edges inward on the curved edge – leave the bottom flush with the template. A little starch or pressing fluid helps hold it.

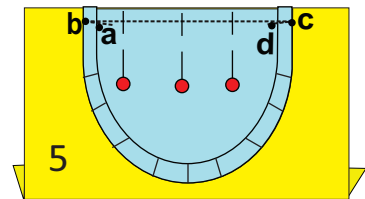


Full-size pattern for the arch on top of the zigzag tower

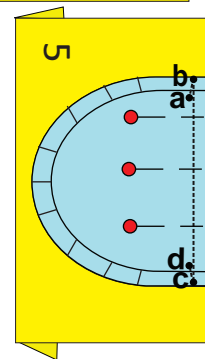


**19** Peel out the freezer paper. Center the arch in the middle top of level 5, good side down. Piece 5's top raw edge extends upward.

**20** Pin raw bottom edge of the arch to the center top of level 5. You can clearly see where to stop and start, so you don't need to mark these spots.



**21** Rotate pinned seam to the right. Pull up threads at **a**, backstitch to **b**, sew down to **c**, backstitch to **d** and cut threads.

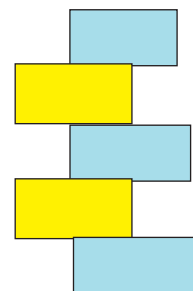


**22** Press both seam allowances DOWN behind wider level 5.

**23** Your tower is finished! Or is it? I cut a clock from one novelty fabric, and Kaffe Fassett kale from another! I backed them with fusible web, and zigzag stitched the raw edges with invisible thread. I quilted along seam and main plaid lines.



Once you understand the construction principles, you can change the layout and sizes any way you like! How about a zipper building, like this?



# Create Perspective from Striped Fabrics

## Easy 2-point Perspective Tower

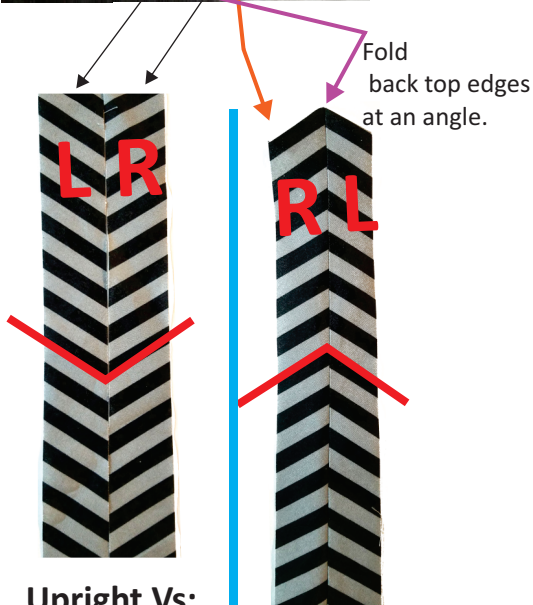
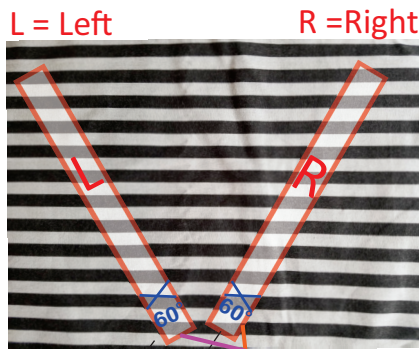
**Upright Vs:** You're looking DOWN at a building!



**Upside-down V's:** You're looking UP at a building!



Cut both!



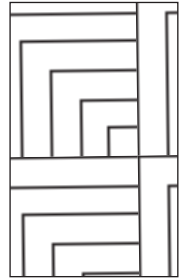
**Upright Vs:**  
You're looking DOWN!

**Upside-down V's:**  
You're looking UP!



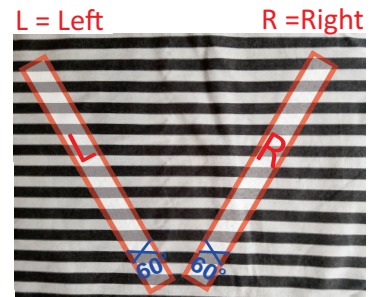
## One-point perspective two-minute building

**1. Create main building.** You can use a single fabric. Cut to whatever size you like. 9" x 12" is the size I used for "The Sampler Quilt". If you've already made the other buildings for the sampler, choose a different overall color for this building, so it doesn't run together with the others.

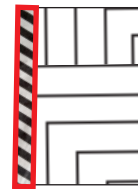


**2. Choose an angle.** See the diagram below to choose your strip. Either way: Cut it the same height as the main building above (12"). 1.5"-2.5" is a good width.

Choose one!

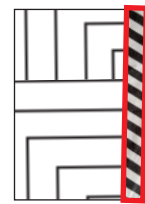


Left cut placed left:  
You're looking down!



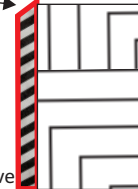
Upright Vee

Left cut placed right:  
You're looking up!



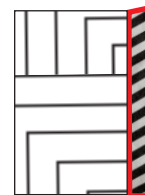
Upside down Vee

Right cut placed left:  
You're looking up!



Upside down Vee

Right cut placed right:  
You're looking down!

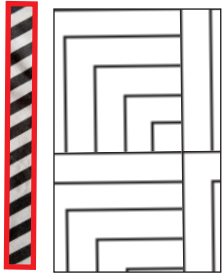


Upright Vee

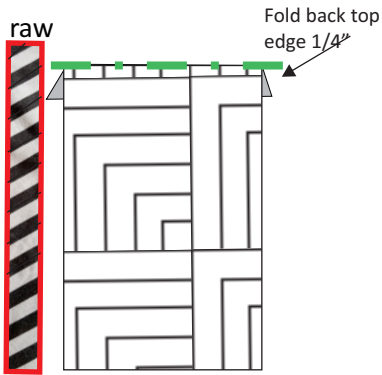
Bending back the perspective side enhances the illusion.

(continued)

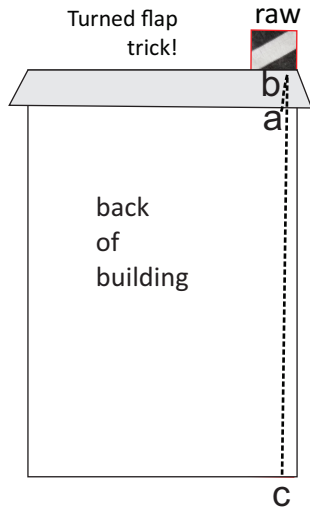
Building fabric and perspective side are cut the same height.



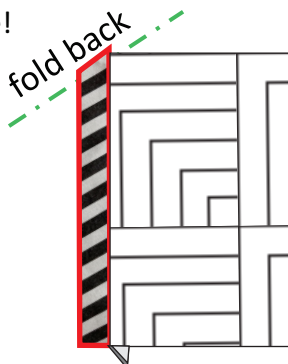
3. Press building's top edge back 1/4".



4. Sew like this, backstitching over the top flap, from a, to b, then all the way down to c.

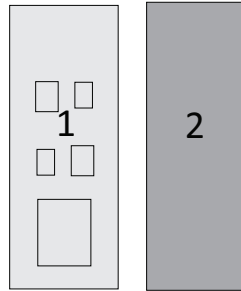


5. Press open. Press seam allowance under the main building. Fold back perspective side on an angle!

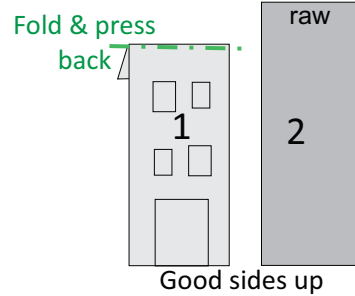


## Add perspective to more complicated buildings!

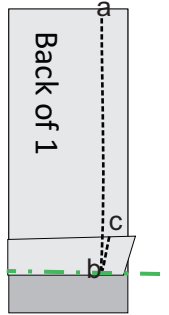
1. Cut same height



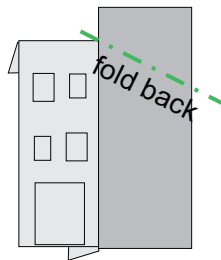
2. Press 1's top edge back.



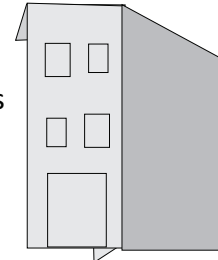
3. Sew like this



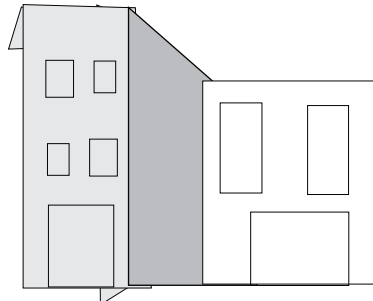
4. Fold back



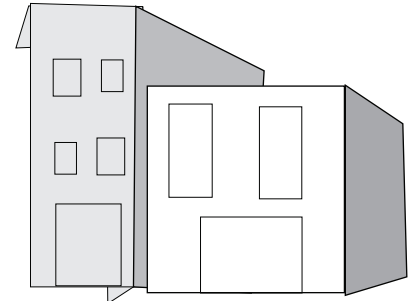
5. Building looks like this.



6. Line up a new building, set back, or on the same level.

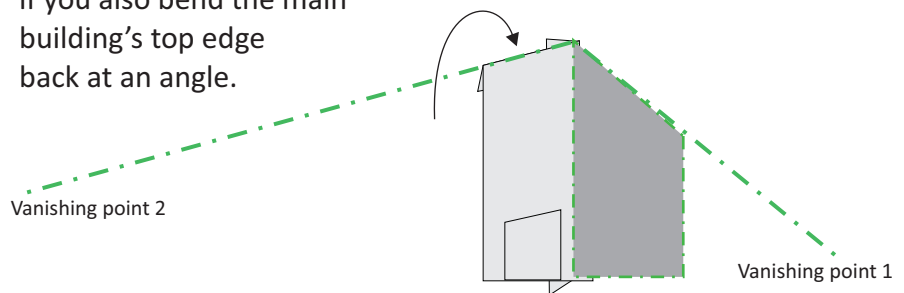


2nd building can be pieced to right edge of 1st.



2nd building must be applied to right side of 1st.

7. Create two-point perspective if you also bend the main building's top edge back at an angle.

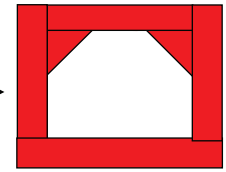
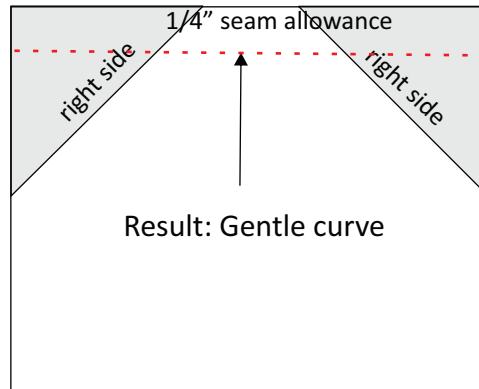
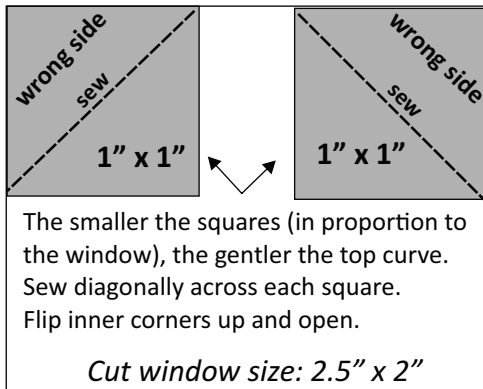


# Create an illusion of arched windows with squares in the corners

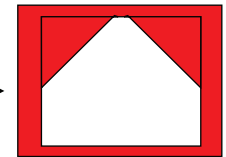
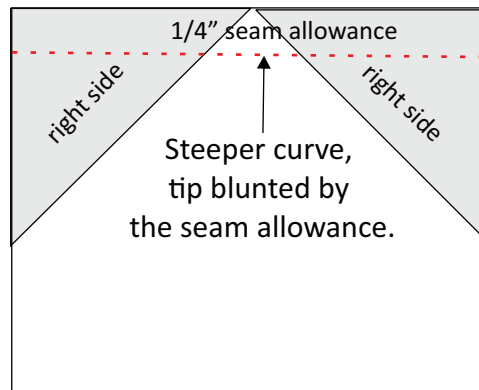
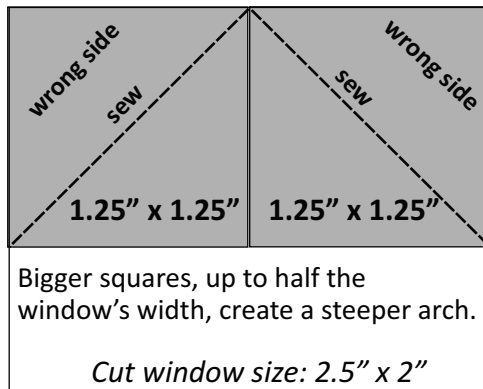
White is the window glass/room color. Light grey is the "building" color (bricks, cement, etc.) Dark grey is the back of the building color fabric. **The designs can be used at their actual sizes, or you can easily adapt this idea to any size arched window that you need.**



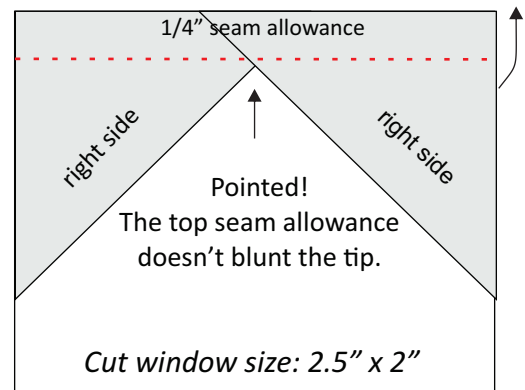
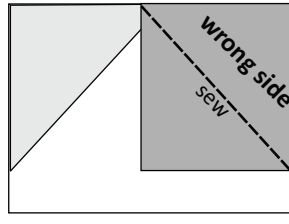
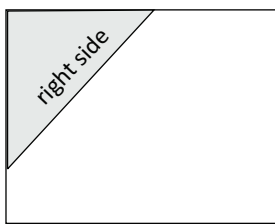
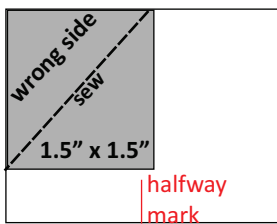
## Smaller squares = gentler arch



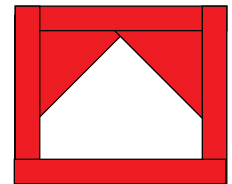
## Larger squares = Steeper arch



## Largest squares = Pointed tip



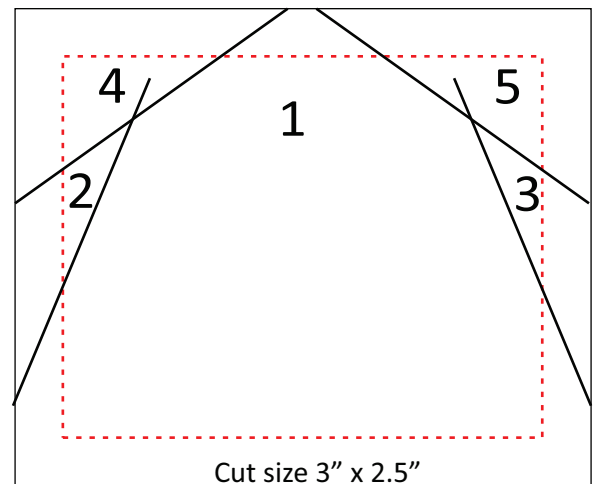
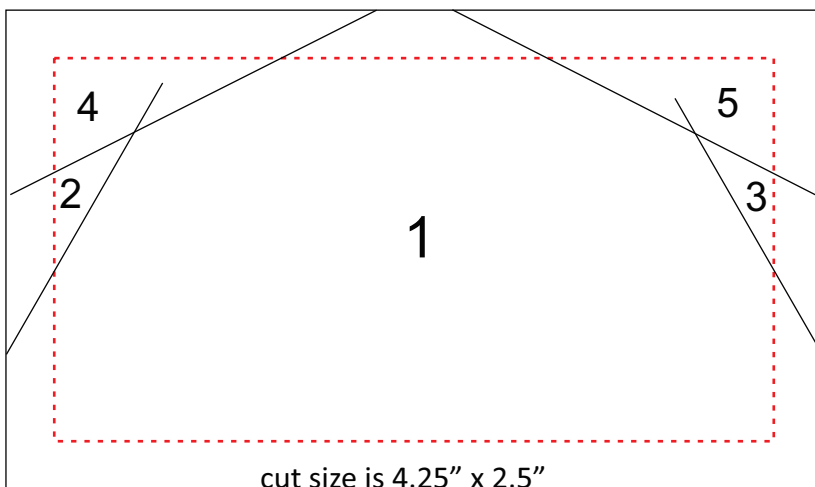
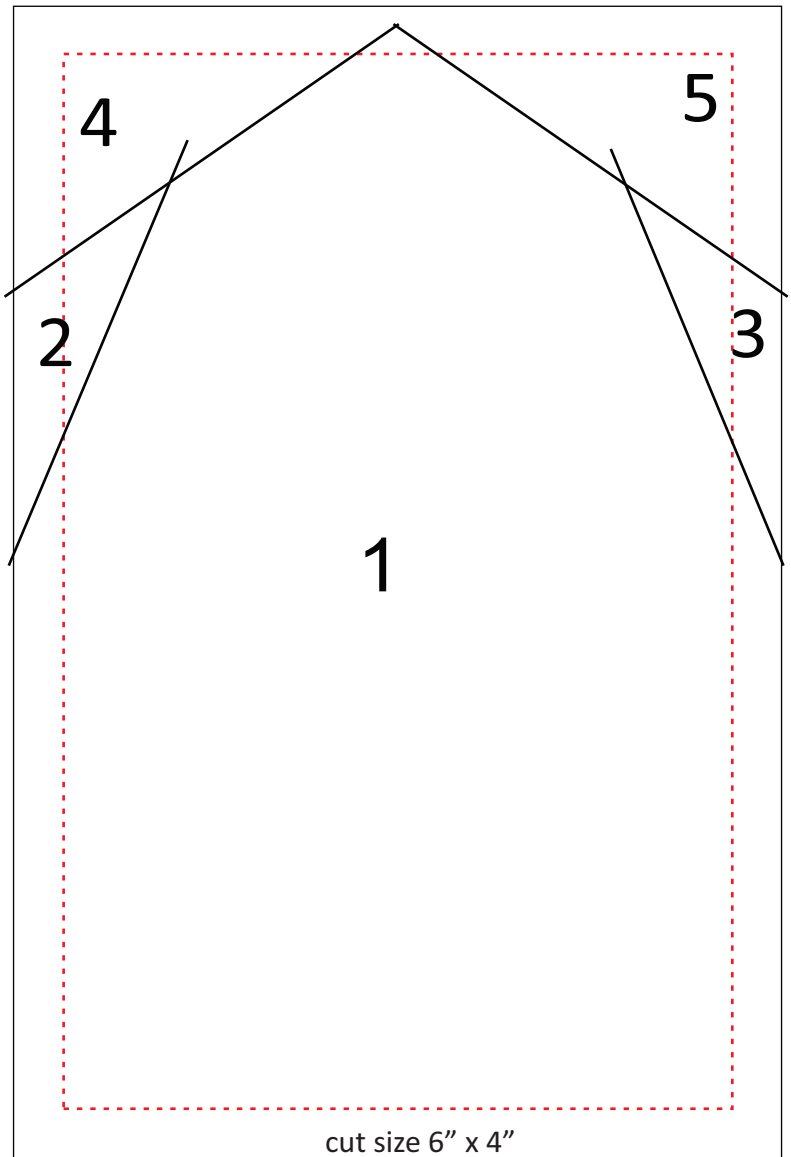
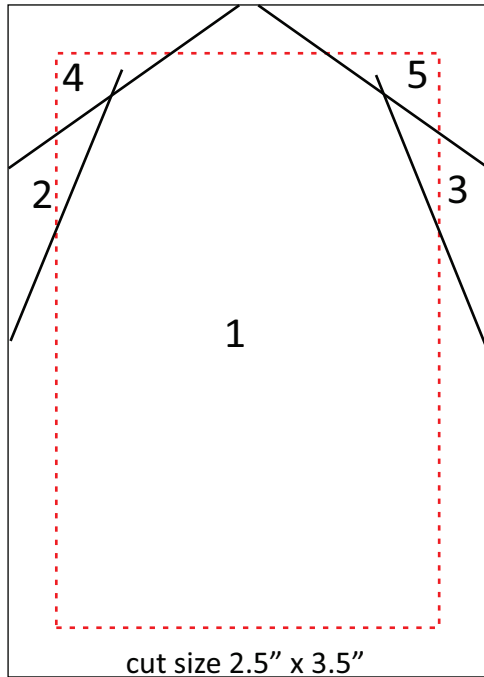
4. Press up and enjoy!



# Full-Size Foundation Paper Piecing Patterns

You can use these at the same sizes that are shown here.

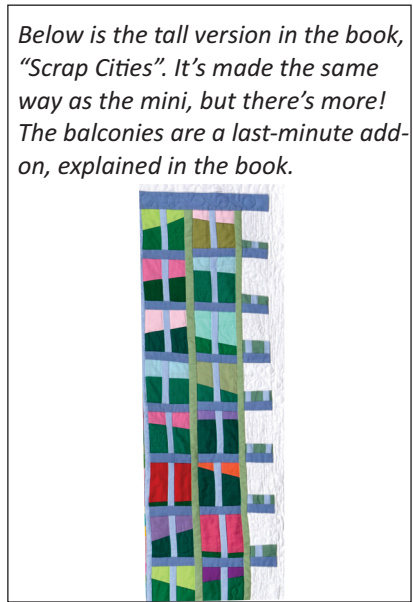
You can grow or shrink these sizes on a copying machine---but in that case you **MUST redraw** the 1/4" (red) seam allowances (within the new black outline), in order to be accurate.



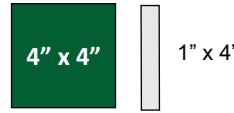


# Flip & Split Condo Tower

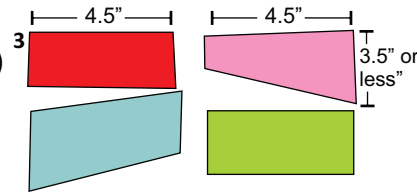
Go wild with window-shades! This is an opportunity to have a lot of fun with florals, polka dots, theme fabrics of any kind! Choose a “main” color, for the outer four borders (sides, top and bottom) that is different from the main/outermost color of other buildings in your sampler. In these illustrations, I used medium-dark blue for those strips.



- For a THREE-story building, cut six 4” squares to represent the glass in each window’s lower area. (I used green but you can use any dark color).
- For each window’s vertical divider: Cut six light strips 1” wide x 4”.



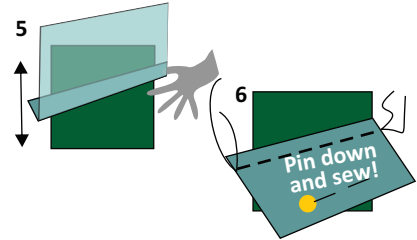
- Prepare 6 shades from assorted fabrics. Cut pieces a little wider than the windows (approx. 4.5”) by a slightly shorter height (4” or less). The top and two side edges should be cut square; along the bottom edge you can cut them at an angle.



- Press bottom edge of each shade back 1/4” to the wrong side. You can fold them up at any angle.

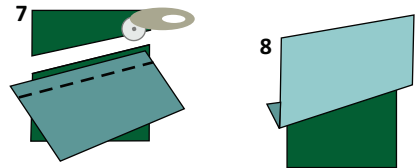


- Place a shade (with fold), on a square. Slide up and down til you like the position, and the shade covers all of the window above the fold.



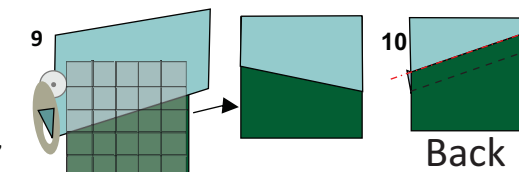
- Holding the seam allowance in position, fold the top part down so you can see the fold’s crease. Pin. Stitch the crease.

- Trim away the back fabric, leaving about 1/4”.



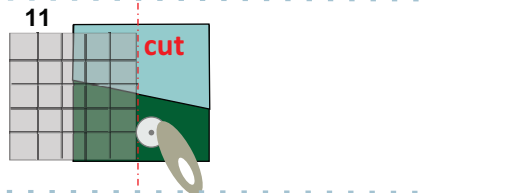
- Fold up and press one more time.

- Use a ruler to trim the unit down to a 4” square.

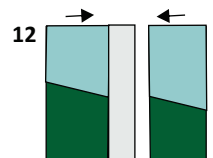


- Trim seam allowances on the back flaps to 1/4”, if needed

- Cut in half vertically. Use a ruler to cut at exactly 2” across (or half the size of your window).



- Sew a 4” x 1” pane strip to the right side of the left window half. Sew right window half to the other side of the pane. Press seam allowances under the strip. Trim so top and bottom strip ends are even with the window. Now each window is about 4” wide (again!)



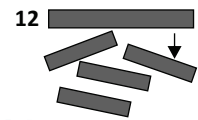
Three stories finish at about 12.5” x 14.5”

## Fabric

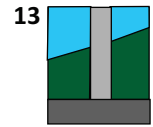
- Window glass. Darkest fabric. For 3 stories, cut six 4” x 4” pieces.
- Window shades, in multiple colors and/or prints.
- Medium and light values. Six pieces, each at least 4.5” wide x a variety of heights.
- Vertical pane strips, each 1” x 4”. Same number as you have windows. For three stories: 24” total, to cut 6 pieces.
- Horizontal floor dividers, 1” x 4”. Same number as windows. For three stories: 24” total to cut 6 pieces.
- Side and middle long vertical strips: Middle strip is 1.5” x 12” (or your building’s height before adding roof.) Sides are 2.5” x 12” (or height). Use same fabrics for all three, or a different one for middle strip.
- Roof and base: Two strips, each, 2” x 9.5”. Use same color as side strips above. (Exact length will depend on your building’s width.)

(continued)

**12** For floor dividers, use 1" strips. Length: Your windows' average width (4" here). Cut as many as you have windows. (For 6 windows, start with a 24" x 1" divider strip and cut it back.)

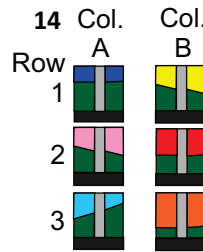


**13** Sew one strip to each window's bottom edge. You can chain sew the units through the machine.



**14** Arrange windows in two vertical columns, and check that adjoining blocks don't repeat the same shade fabric (unless you want them to match!)

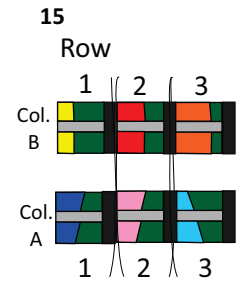
**15** Turn rows sideways (or just THINK of them sideways!), and chain sew. Starting in the upper left of diagram 15, flip the Column B Row 2 window (red shade), good side down, onto the Column B, row 1 window (yellow shade) You are sewing the red shade's top edge to the bottom of the floor divider in row 1. Send through machine.



Without cutting threads, flip Column A Row 2 piece (pink shade) onto Column A row 1 piece (blue). You are joining the red shade's top edge to the bottom of the floor divider in row 1. Send through machine, then cut threads.

Lay the pieces back in position, with the two columns still attached by threads. Flip the Row 3 pieces onto the bottom edge of the row 2 pieces, and sew. Cut threads only after every two seams, column B followed by column A.

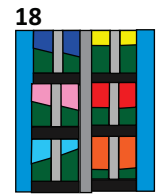
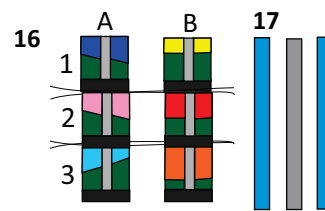
Rotate!



**16** Press seam allowances under the floor dividers. Cut threads apart.

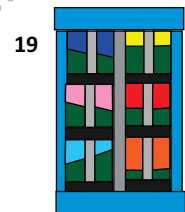
**17** Measure column height. Three stories totals about 12". Cut three vertical strips. The center is 1.5" X 12" (or your column height). Two more are 2.5" x 12", for the outsides. (All three can be the same color, or you could use a different color for the middle strip).

**18** Sew each column of windows to the sides of the narrowest strip. Sew the remaining vertical strips to the right and left sides of the building.



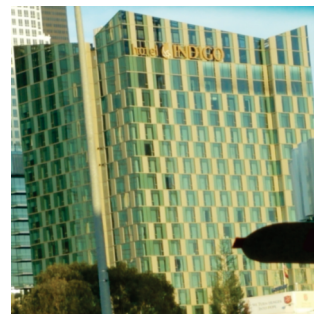
**19** You can add a roof now. Cut a strip 2" high by the width of your building and stitch in place.

I also suggest you add a base now, the same size as the roof. This will give you a little leeway if you need to trim the bottom later in the process.






# The Hotel Bargello

Bargello is a superfun quilting technique that involves strip piecing, cross-cutting, then offsetting. Plenty of buildings scream “bargello” at me. Once you start looking, you will see them, too! Choose colors that are different from your other buildings for the darkest strips (which are also the outermost strips).



Los Angeles' Hotel Indigo

Mini-size for sampler quilt: 11" x 13"  
1/4 yard or fat-quarter of:

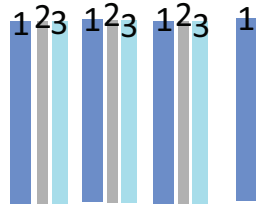
-  Window glass. Darkest.
-  Shadow. Medium.
-  Building material. Lightest.

*Note: This is the mini-version for my class. My "Scrap Cities" book version is larger, with one additional set of three vertical strips.*

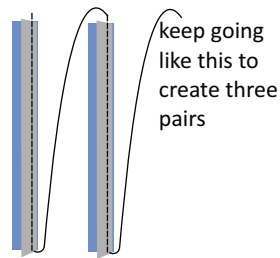
## 1 Cut:

- Four strips of window glass (dark) fabric, 2" wide x 18". (Strips 1 in the diagrams)
- Three strips of shadow (medium) fabric, 1" wide x 18". (Strips 2 in the diagrams)
- Three strips of building material color (light) fabric, 1.5" wide x 18". (Strips 3 in the diagram)

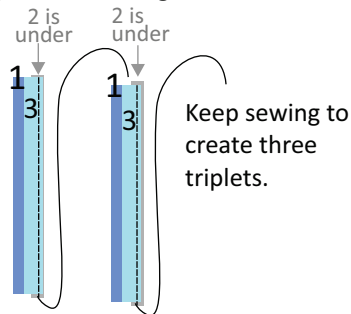
**2** Lay out as shown. Join the first nine strips into sets of three. I space them into groups of 3, numbered (in my head) as shown.



Then, I chain sew: Flip the first piece 2 (the one on the far left) face down, onto the first piece 1 (dark, furthest left), and send through machine. Without cutting threads, flip the **next** piece 2, face down, onto the **next** piece 1, and sew. Keep going so you have a connected chain of four pairs.



**3** Press seams (choose a direction, right or left, and stick with it). Cut threads, lay everything out in order again.

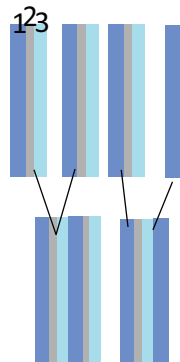


**4** Chain sew again. This time, flip each strip 3 onto the right edge of each 2, and sew. When you've done all three, press seam allowances in the same direction as before.

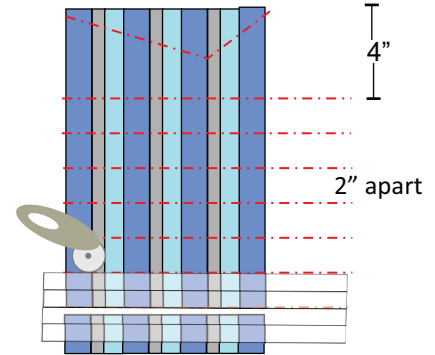
**5** Cut apart and lay out in order again. Now you have three triplets and a single on the far right.

**6** Sew the first two triplets together. Then sew the third triplet to the remaining strip on the far right.

**7** Join the two groups. Press in same direction as earlier seams.

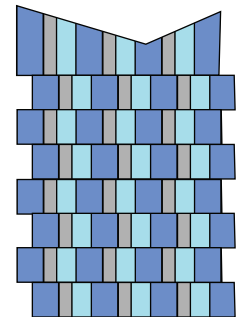


**8** Use rotary cutter and ruler to cut the set apart at 2" intervals, starting at the bottom. Leave the top however much is leftover, probably around 4".



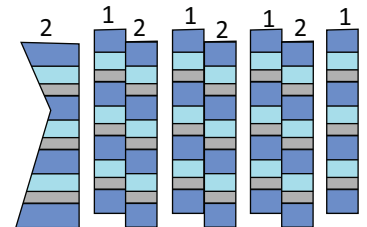
**9** Option: Cut top edge into a wedge, like Los Angeles' Hotel Indigo. The top right and left corners stay the same 18" height; the low point is on the seam, about 2" down from the top.

**10** Shift every other strip a little to the right, so each window glass piece (dark blue) sits PARTIALLY on the same color piece below it.



**11** Sew strips together, maintaining the shifts. I turn everything sideways (shown below, right).

Chain sew the middle six strips into pairs: Flip each piece 2 (which is lower) onto each 1 (higher), maintaining the offset. Pin and sew.

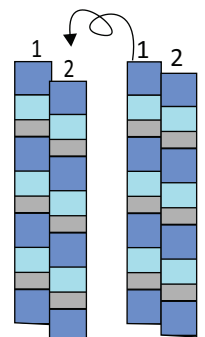


**12** Join the three central pairs shown. Press all new seam allowances in the same direction (toward the top or bottom of the building) – pick a direction and stick with it.

**13** Cut threads and replace what you've sewn in the lineup.

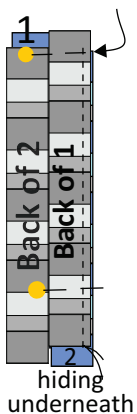
Now each higher piece 1 (which has a 2 sewn to its right side) must be flipped and sewn onto the lower 2 piece **in the pair to its left** - but that means the strip 1 on top will hide the beginning of the underlying #2 piece!

(continued)

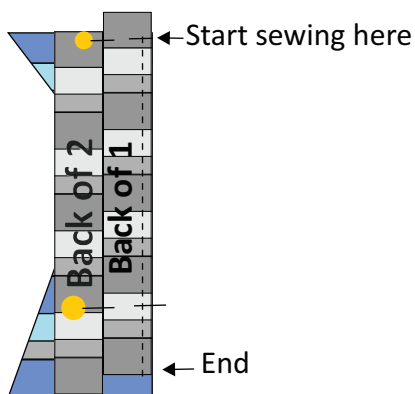


There are a couple of ways to handle this. One is to flip the strips you're joining to their reverse side – but I find that confusing. Here's what I do that confuses me less!

**14** The diagram shows the back of a 1+2 pair (grey because it's the back), flipped onto the 1+2 pair to its left. Raw right edges are aligned. On the back of grey strip 1 on the far right, I put a mark or a pin where the underlying 2 piece begins. Bring up threads and sew down from there. (No need to backstitch).



**15** At the bottom, you can clearly see a where to stop (Where the strip 1 on top ends. It's okay if you sew off the end onto 2, however – nothing terrible will happen.)



**16** Sew the remaining seams this way. Here's what it will look like when you join the roof to the pair on its right. Again, start at the top where the underlying piece (in this case the roof) starts.

**17** Trim sides even (on the red dotted line).

**18** Press top edge under 1/4". If you angled the roof, you will have to release a few stitches from the seam where the lowest point lies. Later you can decide if you will be piecing or appliqueing this building in place. Hold off pressing the side edges under until you know how you will join it to its neighbors. Similarly, don't fold the bottom edge up until you know where you want it. You might piece it to a building under it, or leave it extended if this becomes the base of the quilt.

