

# Building the Circular Tower

You will need to fill this mold 18 times to have enough blocks to build the circular tower. Be sure the blocks are completely dry before gluing them together. For detailed instructions on pouring the blocks, see the Casting Instructions Page.



## Casting Tips

For complete instructions on pouring the blocks, see the Casting Instructions Page. Below are a few tips to help you with the Circular Tower mold.

**Due to requests for more ornate pieces, I've included a special decorative brace. When casting these small ornate pieces, the following tips will help you eliminate air bubbles.**



When pouring plaster into the small pieces with deep recesses, flex the mold to stretch out the area. This will leave fewer narrow crevices to form air bubbles.



Also, after you pour the plaster in, use a toothpick or dull pencil and trace around the shape to release air bubbles. Mixing the plaster **slightly** thinner will also help. Be sure to tap the mold often to release air bubbles.

If small defects occur, don't worry; real stone buildings also have defects. Besides, when you put the whole building together you'll be so impressed with the result that you won't be able to find them anyway!

# Building Instructions

We'll start by making a circular form to build around. Take 3 sheets of typing paper and line them up end to end in a perfectly straight line. I used my wall at home to help. Tape them together as shown.

1.

Measure **9 1/4"** from one end and put a mark. Roll up the paper and match the line you've drawn to the edge of the paper. This will form a fairly exact 3" diameter circle.



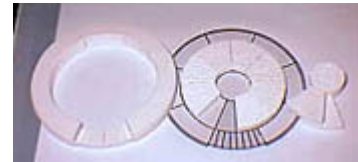
2.

Lay the center block and the floor tiles all around on the floor plan. You can download the plans from the Building Plans Page and print them out yourself. **Only glue** the floor tiles shown in green down to the floorplan. You should be able to remove the center block and the one floor tile as shown.



3.

Replace the center block and floor tile and add another floor tile to form a step (shown in red). Glue this group together. Place the smooth outside base trim around the outside along with the flat doorway bricks (shown in green) and glue this group together. When dry, remove the separate sections.



4.

Now we'll work on steps for the circular staircase. You've already made a 2-step piece (shown in red above). We need to make 7 more. Place a round block in the center of the floor plan and place 2 more floor tiles to form another step section. Continue until you have a total of 8 step sections.



5.

Place the paper form inside the base ring. Place and glue the blocks around the ring. Continue until about the 4th row.

We want to make the tower in removable sections so we can paint the inside. Stop at this point and mark the top in red. **These marks tell you where not to glue.**



6.

Continue to build up until you reach the 8th row. The next step is to put in the 1st floor along with the circular staircase. The picture on the right shows what the finished 1st floor and staircase should look like. **Now we need to back up and show you how it's done.**



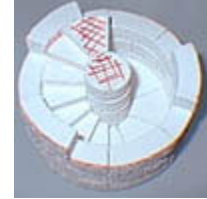
- Mark the top section in red where the floor opening should go (refer to the floorplan diagram). **Flip the top section over.**
- 7.



**Assemble the 1st floor upside down** to be sure how it goes.

Set and glue the 1st floor inside the top section of the tower.

8. Place the next 3 step sections on top (upside down) spiralling them around the tower. Mark the last step section in red to remind you **where not to glue**.



**Remember that we're working with the tower upside down!** Flip the bottom section (with the doorway) upside down and place it on top of the other section. Continue the stairway until you reach the top (or bottom depending on how you look at it.)

9. After you've placed the last step section, flip the paper floorplan over (along with the tiles glued to it) and set it in to make sure everything lines up. **Do not glue the floor on at this point!** Let the tower dry completely.



10. When dry, turn the tower back **right-side up** and glue a couple more blocks on. Once again, mark in red where not to glue.



11. No matter how carefully I design the blocks, sometimes there's one little thing you have to fix. The arrow slit for the curved tower is about the most difficult piece I've ever carved. After all my calculations, it's still 4/1000's of an inch too wide. Take that measurement times 8 arrow-slit blocks, and the tower will bulge 1/16th of an inch on one side.

To remedy this, lightly sand a little off the arrow slit as shown and test fit the blocks together before you glue them.



12. Continue building and gluing (you can re-insert the paper tube to help you). Mark in red where this section will stop. Now we're ready for the last section.



13. To make the roof, layout the bricks as show **upside down!** You'll notice that I've included a special 5" diameter block that fits around the outside of the 4" diameter blocks. Glue this together and let it dry completely!

Finish the tower by adding on the decorative braces and crenellations as shown. The red lines indicate where the tower comes apart for easy painting.



# Painting Instructions

For information on types of paint and supplies you will need, refer to the Wizard's Tower Painting Instructions.

For the Wizard's tower, I used shades of gray by mixing black and white paint. I'm using the same colors for this model also.

1. Notice that the circular tower was built in 5 separate pieces. This will allow you to paint the inside more easily. Even in separate pieces the circular stairway is a little harder to reach than in the wizard's tower.



The first coat of paint is a dark gray. You can use house paint or a tube of acrylic artist paint. Be sure to mix this first coat thin (about the consistency of milk). If you're using house paint, it's about 1 cup paint to 1/4 cup water. If you're using a tube of paint, add more water.

2. Using a 1 inch brush, drench the paint on so it runs into all the cracks. If you used water based glue; **be careful!** The paint will soften the glue. I usually paint the inside and let the model dry overnight, then paint the outside. Once the first coat is on and dry, you don't have to worry about the paint softening again.



Mix up your medium color of gray. It should be a shade lighter than the color of the finished building. **Do not thin the paint!** Using a dry brush, dip it in the paint and **try to wipe all of the paint off** onto a paper towel.

3. Brush over the surface with a **light to medium pressure**. This is called dry-brushing. The paint will stick to the highlights of the stone and all of the texture will show up. It's works the best if you have **almost no paint in the brush** and use more strokes to cover the area.



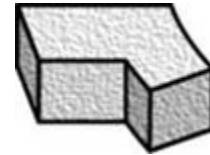
The last coat is light gray (4 shades lighter than the medium gray). For this coat, wipe the brush completely dry and barely touch the surface when you brush over it.

4. Here is a close-up of the finished tower. If you intend to do a lot of wargaming and other activities with the tower, be sure to give it a coat of flat varnish or lacquer to protect it.



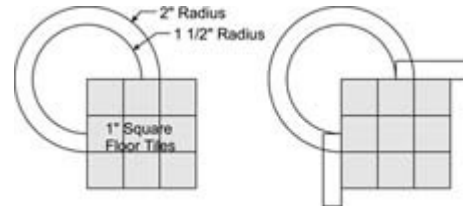
# Using Connector Blocks

1. The connector brick looks like this. It's especially made to connect your circular tower to straight walls. I haven't had time to make a model showing every possible way to use the brick, so I'm going to show diagrams of how you can use it.



This shows a layout using the circular towers on the corners. You can lay this out easily on regular graph paper.

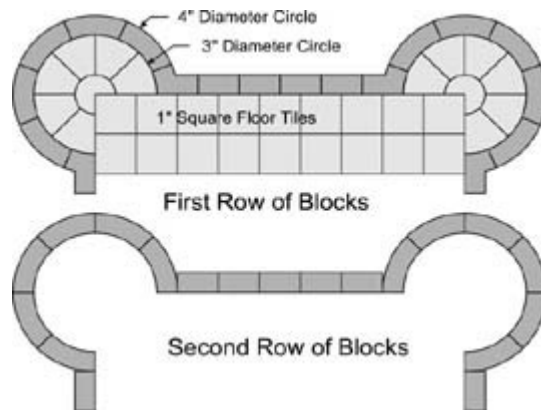
2. Start by drawing 1" square floor tiles (don't put the outside walls on yet). Then set your compass at 1 1/2" and draw a circle using the corner of your floor as the center point. Now draw another circle with your compass set at 2" (same center point). This represents your curved wall section.



Now draw the straight outside wall around your floor tiles.

Now you can use your graph paper to draw in the blocks that represent the wall.

3. For the first row we'll use the connector blocks. On the second row, we'll use only the curved tower blocks and straight blocks. You can see that I've alternated the blocks so they overlap each other.



It lines up nice and straight. If you wanted your towers completely round with a circular staircase inside, simply add a few more curved blocks to close off the inside (except for your doorway).

This example shows using the connector blocks to add curved walls onto a flat one. Once again, you can continue the circle all the way around if you want a circular staircase, or you can leave it empty to add interest to a flat wall.

4. Circular walls can also be used for balconies, especially with the decorative braces along the bottom and finishing caps on the top. Experiment with the blocks and see how they stack up. You'll find a lot of interesting uses for the curved sections.

