

Gingerbread Construction Tools:

parchment paper (lots of it)
bread knife
silpat (optional, but preferred for pouring sugar)
rolling pin
dremel & scrap wood (optional, but helpful for carving more intricate templates)
strips of wood that are precisely 3/16" thick
razor knife or sharp paring knife
Pastry bag and tips (optional)

Gingerbread Dough For Construction

Ingredients:

1 1/4 cup shortening
1 1/2c. sugar
2 T cinnamon
1 t. ground nutmeg
9 cups flour
1/2 c. corn starch
2 cups dark corn syrup or molasses
1/4 c. water

Make Gingerbread Dough

In a large mixer bowl, cream the shortening together with the sugar and spices. Scrape down the sides of the bowl until the shortening mixture is completely homogeneous. Add the flour a few cups at a time, mixing after each addition. (If you are using an electric mixer use the slowest speed) Eventually the shortening will mix completely into the flour and it will resemble just-barely-damp sand. Pour in the molasses and water and mix until the liquid is distributed throughout the dough. The dough is *very* stiff, so you'll need to knead it just to get the whole mass to come together. Turn the dough out onto a counter top and divide it into three parts. One by one knead each portion of dough until it is smooth and homogeneous. Press the dough into 1" thick rectangles and wrap tightly in plastic wrap. Let rest an hour or so before you roll it (just leaving it out at room temperature is fine). If you won't be using it that day, store the dough in the refrigerator, but bring it up to room temperature before you roll and shape it.

Roll & Shape Gingerbread

It is always a challenge to get your gingerbread uniformly, but an even thickness makes your house *much* easier to assemble. I glued a few strips of balsa wood together to make guides for rolling the gingerbread dough. This way I knew that all of my gingerbread pieces were rolled to exactly 3/16" thick. (See the section on designing a gingerbread house for more information on thickness). Take a few minutes and make (or just buy) guides for rolling your dough. Trust me, it will be much easier to roll your gingerbread, and you'll get a better end result. And most importantly, you won't have any thin, weak spots liable to break during assembly.

Once the gingerbread is rolled out, you can use a number of techniques to give your gingerbread pieces some texture. You can roll them into a mold (like I did with the decorated friezes on the front of the house). Or you can use a butter knife or stamps to press a design into the surface. Remember that the gingerbread will puff up when it bakes, so don't make your designs too subtle. It's better to make them a little too deep than too shallow.

You can also sculpt little pieces of gingerbread and add them to a flat piece of dough to make a pattern. (See the pilasters on the front of the brownstone. Brush a little water on the surface where you want to attach a decorative piece, and use it to stick the pieces together. You don't want to let your designs get too thick, though. Thicker pieces take longer to bake and are more likely to deform. Stick to mostly thin designs-- a half inch would be the absolute thickest that I'd try to bake.

Bake Gingerbread

Just about everything deforms when you bake it. After all the work cutting pieces and impressing designs in them, we want to try to minimize the puffy swelling that happens in the oven. First, I specify letting your cut & molded gingerbread pieces dry overnight. This helps set the surface texture up, so that we'll see more of it after baking. Then when the pieces actually go in the oven, you'll want to cook them at a very low heat (I used 250°F) with the oven door propped open with a wooden spoon. All this results in drying the gingerbread and cooking it very slowly. It will likely take an hour until your gingerbread is done (maybe longer depending on altitude, moisture, thickness...) Just keep checking it every 15 minutes or so, and eventually you will see it turn a slightly darker shade of brown. If you touch the surface of a piece, it will feel mostly firm, and your fingers will not easily leave an indentation. Try to group your gingerbread pieces with other pieces that are a similar size. Smaller and thinner pieces will bake more quickly, and it will be easier to remove a whole sheet of small pieces together. Let all gingerbread pieces cool completely before assembling.

Trimming Gingerbread

In spite of all the efforts, the gingerbread pieces will still deform a bit during baking. You can either use royal icing to fill in the gaps, or you can very, very carefully trim the gingerbread pieces back to straight lines and perfect right angles. The risk with trimming is that you could break your gingerbread piece. On the other hand, trying to piece together distorted pieces can require using a lot of royal icing, and this will make your connections not look as tidy. You've got to make the call. This gingerbread recipe cuts very well when the pieces are at least 3/16" thick. Thinner, more delicate pieces are prone to shattering.

To trim the gingerbread, start with a serrated bread knife and gradually shave away at the excess until you have the shape you want. Once you have a few pieces assembled, you'll want to trim your pieces to fit together with the other (imperfect) pieces. So test each piece before assembly and trim as necessary.

Royal Icing

6 egg whites
9 c. powdered sugar

Make Royal Icing

Pour egg whites into a large mixer bowl. If you are using a stand mixer, fit it with the paddle attachment. Sift powdered sugar. (You can skip this step if you are using a stand mixer.) Add 2 c.

of the powdered sugar to the egg whites. Mix. Keep adding powdered sugar a cup at a time, mixing until the icing is smooth after each addition. Once you add the final powdered sugar addition, the mixture should be thick, almost like a buttercream. If you are using a stand mixer, turn the speed up to medium and beat for a few minutes. This will beat out any remaining little chunks of powdered sugar that could trip you up later on. If you are not planning to use the icing right away, transfer it immediately to a plastic container and cover. The surface of the icing dries out very quickly, so always plan to keep it covered. I know it has egg whites, but it is fine to keep this icing out at room temperature. The sugar concentration is so high, that it is not at risk for harboring nasty little microbes.

You can also color royal icing. I added a few tablespoons of cocoa powder and a little cinnamon to make a my icing roughly the same shade as my baked gingerbread. Of course you can use food coloring to color royal icing too. Just make sure that you don't add so much that the consistency of the royal icing becomes runny.

Adjusting the Consistency

To minimize frustration and gingerbread induced despair, it is essential that your icing be at the proper consistency. If it is too stiff, it won't stick and will be impossibly hard to pipe. If it is too runny, it will run right off the gingerbread or turn your intricate designs into a puddle. Too stiff and you can add a few drops of water, to runny and you can add powdered sugar. I prefer to make a big batch of royal icing, (as my recipe indicates) and make sure that it's on the stiff side. It's much easier to add a few drops of water and loosen things up than to add more powdered sugar (it takes a surprising quantity of powdered sugar to stiffen things up). At the right texture, the surface of the icing will look shiny, but it will still hold its shape when you grab a spoonful. You'll want to use either a cornet or a piping bag to get your icing where you want it. Cornets work best for small quantities of royal icing--for this gingerbread house I only used cornets.

Making Cornets

1. Cut paper: Roll out and cut a section of parchment paper that is about square, or just slightly rectangular, with the width of the roll being the longer side. Cut the rectangle along the diagonal.
2. Roll into a cone: Roll the triangle into a cone, with the tip of the cone at the center of the longest side. There are three corners that you want to align: the bottom, the middle corner and the top. Line up these three layers, and your cornet will have the right proportions.
3. Tighten: Tighten the cone by pulling down on the outermost layer of paper while pushing up on the innermost layer with your thumb. The tip of the cone should close completely.
4. Lock: Fold over the flaps of the cone to lock the cornet together. I like to pinch a little vertical fold along the locked overlap on the base of the cornet (where you have the most layers of overlapping paper). This helps keep the slippery parchment paper from slipping and becoming loose. Make a few cornets at a time and have them ready to go before you start. For this project, you'll want to have at least three or four ready to go once you start assembling and decorating your house.

Filling Cornets

Place a cornet tip down into a narrow-mouthed jar. Use a spatula to carefully scoop and a few tablespoons of icing into your cornet– try to avoid getting any icing on the top 2 “ of the cornet. (If you pour straight from the bowl you’re much more likely to make a mess.) *Do not overfill*- it might seem like it will save you time, but your icing will start to ooze out the back of the cornet later. Pick up the cornet and hold it with the seam facing you. Gently squeeze the icing down toward the base of the cornet. Try to get all of the icing out of the top two inches of the cornet. Fold over the ends of the cornet away from you. Then begin rolling the end of the cornet away from you, like you would a toothpaste tube. Snip the tip off your cornet and start squeezing from the end. Try to cut an even tip- no diagonals or wonky edges. When you are piping with the cornet, keep using the same toothpaste tube rolling motion to squeeze the icing out.

Royal Icing For Structural Connections.

When it is completely dry, royal icing is quite firm. Hard enough to hold up a big gingerbread house. But, the icing has to be *completely* dry for it to be strong. And disturbing it while it dries can ruin the hold and even collapse a gingerbread house. The thicker the icing is applied, the more weight it will hold. But the thicker the icing is applied, the longer it will take to dry. Royal icing connections work best when the joint is well coated with royal icing-- a smear of icing between two gingerbread pieces will not hold any weight. . If you want a neat looking connection on the front of your building, I suggest loading the back of the connection with a thick bead of royal icing. My summation: use enough icing, and let it dry completely without disturbing it. Sometimes this means gluing a few pieces together, and then leaving them for a while. Gingerbread building is an exercise in patience.

Royal Icing For Decoration

You can make a stunning gingerbread house using just royal icing decorations. Traditional decorations are piped directly onto the gingerbread pieces. But if you’re feeling ambitious, you can also pipe freestanding pieces onto a piece of parchment paper, then (when they are completely dry) you can carefully peel them off. I used this technique to make the fire escape and the bicycle. Remember that the thinner your piping the more fragile your finished pieces will be, so larger pieces will need to be thicker to stay in one piece.

Poured Sugar

1 c. sugar
½ c. water
1 T white vinegar

Safety First

Cooking sugar is not difficult, but it can be dangerous. Boiled sugar reaches much higher temperatures than boiling water, so little spatters of this stuff can really burn. If you do happen to get a spatter on you (don’t!) do not rip it off, immediately run the area under cold water, then once it has cooled, remove the sugar. A clean, uncluttered work space is also essential to safely work with this hot, sticky stuff.

Cooking Poured Sugar

Once the cooked sugar is ready to pour, it needs to be used immediately, so before you cook your

sugar, prepare the surface where you will pour your sugar. I like to pour the sugar on to a silpat, directly on a countertop. (You can also use parchment paper) Make sure that your silpat/parchment paper is completely clean of specks and oil-- if you're in doubt rub it clean with a little white vinegar. If you are worried about the heat coming in to contact with your counter, use a cutting board or pizza stone as a base surface. (Metal sheet pans will buckle with the heat, I don't recommend them.)

Place sugar in a saucepan. Pour the water around the edge of the pan to wash any rogue sugar crystals into the center of the pan. Draw a clean finger through the center of the sugar pile to moisten any dry sugar in the center of the pan. Cover and place the saucepan over high heat. Grab a bowl and a pastry brush. Fill the bowl with cool water. Once the sugar mixture has come to a boil, remove the lid. Keep an eye on the sugar as it cooks. If necessary, use your pastry brush to clean any sugar buildup off of the sides of the pan. Take the damp brush and squeeze a little water onto the side of the pan directly above the sugary area. As the water drizzles down, it will dissolve the sugary gunk. It is important to dissolve sugar buildup or crystals, otherwise the sugar might crystalize. But you don't want to be overzealous with the pastry brush, adding water cools off and dilutes your sugar, which will make it take longer to cook. So use your water and brush judiciously.

Let the sugar boil. Do not stir. (I know you want to stir it-- don't!) The sugar will boil very rapidly as it heats up. If you want the "glass" to be clear, cook the sugar to 320°F. If you'd like it to be golden (like mine) cook the sugar until it just barely starts to color. (You don't need to use a candy thermometer for this option-- once the sugar has started to caramelize, it is hot enough). Remove the pan from the heat and gently swirl the sugar mixture to even out the coloring. Hold the pan off the heat for a minute or so until the mixture cools to the consistency of honey.

Poured Sugar Windows

Start pouring slowly, the mixture will cool quickly once it is out of the pan. Keep pouring in the center of the sugar mixture, the cooler, firmer sugar at the edges will form something of a dam, so that the sugar you are pouring won't run all over your counter. Pour the sugar out into the desired shape and thickness. As the sugar cools on the counter, use a butter knife to test and see if you can cut the sugar without it sticking. Once the sugar is cool enough, cut/shape it into the desired shapes. Let the sugar pieces cool completely, then snap them apart. If you have failed pieces, keep them clean and free of other crumbs. Then you can throw these cooked sugar scraps back into your saucepan and re-melt them. If you are using the caramel as a coloring (like I did) each time you remelt the sugar, it will get a little darker. I didn't mind the slight variation in color, but it is something to keep in mind.

Poured Sugar Glue

You can also use hot poured sugar as glue to almost instantly set up the sides of the building. First pour the windows that you will need, then carefully dip the edge of the gingerbread piece in the hot "glue". Immediately transfer it to where you need to attach it. Hold in place for about 30 seconds or until the sugar sets up. Once your glue cools down too much, it will be useless for sticking things together. If it starts leaving strands of sugar trailing behind, it is too cool. Just heat the pan up enough to bring the sugar back to a honey-like consistency. Again, don't stir! Just tilt and swirl the pan to mix the sugar.

Using cooked sugar, it is much easier to get the building together in the first place, but it does have some disadvantages. Cooked sugar is very susceptible to damage from moisture-- even just moisture in the air. So a poured sugar creation that looks pristine one day, might melt the next day into a sticky mess. And if that mess is the glue holding your house together... well, you see the problem. I like to use poured sugar as glue to initially get things together. And then (afterward) go back over the seam with

Kitchen Table Scraps

a thick bead of royal icing. The royal icing will set up over time, and hopefully do the job even if the poured sugar should start to melt.