

chapter twenty-two

d Décor

écor is the finishing touch given to any pastry or cake. The pastry chef employs a variety of techniques and materials to craft a look that not only displays creativity and skill but also sets his or her pastries, cakes, and other desserts apart.

Tools for décor

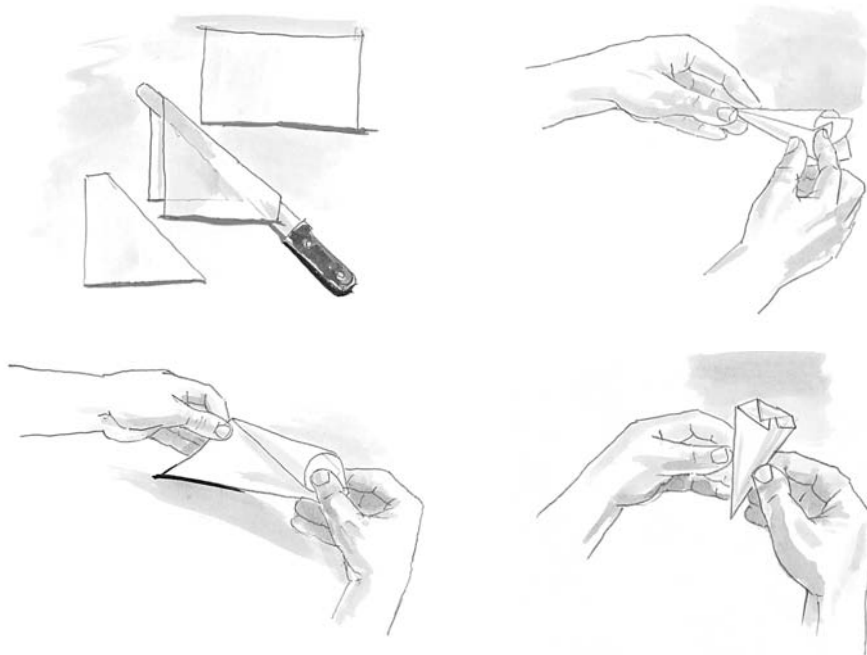
Using a pastry bag and coupler

Buttercream or icing décor work requires many different and specialized pastry tips. When working with many different tips or colors of buttercream or icing, it is most efficient to use a coupler with the pastry bag. A coupler is a two-piece attachment that allows piping tips to be easily interchanged without having to empty the bag.

Making a parchment piping cone

Preparing and using a parchment piping cone is an important part of décor work. To make a parchment cone, it is easiest to use a precut sheet of parchment paper (16 by 24 in/41 by 61 cm). Otherwise, cut a sheet this size from a roll of parchment paper. Place the parchment sheet on a flat surface with the length running parallel to the edge of the work surface. Take the lower left-hand corner and bring it up so that the point of the corner is adjacent to and level with the upper right-hand corner; it should look like two peaks of identical height. Firmly crease the fold. Insert a long, sharp knife (preferably not a serrated slicer) into the folded paper with the edge of the blade toward the creased edge and carefully cut the paper in half at the crease, using a single smooth stroke. The cut edge of each sheet will form the point of each piping cone, so it must be sharp and exact. A clean cut, not possible when tearing the paper or cutting it with scissors, enables piped icings or glazes to fall in a clean, straight line. The cone will also last longer because the clean edge will not absorb moisture as quickly as a ragged one would.

A small piping cone permits closer and tighter control, necessary for the fine work of piping letters, borders, and individual piped designs. Cut the parchment paper into quarters and use the four rectangles (8 by 12 in/20 by 30 cm) to make smaller cones as desired.



TOP LEFT: Folding the parchment paper on the diagonal and cutting with a knife

BOTTOM LEFT: Making a pivot point along the longest edge opposite the 90-degree angle

TOP RIGHT: Rolling into a funnel shape, making a fine point and folding over the paper to fix the cone in place from the sugar

BOTTOM RIGHT: Sealing the filled cone by crimping and folding over the top

Piping buttercream borders and flowers

The technique for piping buttercream is similar to that for piping spritz cookies. The pastry bag is placed in the starting position, pressure is applied to pipe out the buttercream, and then the pressure is released just before the bag is lifted away, leaving the finished décor. By combining different tips and different motions—for example, by moving the tip in an up-and-down, circular, or back-and-forth motion—you can create many different patterns and effects.

Piping a shell border

1. Fit a pastry bag with a star tip. Holding the piping bag at a 45-degree angle, place the tip close to the surface of the cake.
2. Squeeze the bag, allowing the icing to fan forward in a rounded shape while lifting the tip slightly.
3. Lower the tip back to the surface while slowly relaxing the pressure on the bag.
4. Stop squeezing the bag and pull the tip away from the rounded head of the shell, keeping the tip on the surface of the cake to form the “tail” of the shell.
5. To form the next shell, place the star tip at the end of the first shell and repeat.



Piping a shell border

Piping a buttercream leaf

1. Fit a piping bag with a leaf tip.
2. Place the tip close to the surface and pipe out icing to form a base for the leaf.
3. Relaxing the pressure on the piping bag, pull the tip up and away from the leaf base to form the rest of the leaf. Stop exerting pressure on the bag as you pull the tip away to form the tip of the leaf.

Piping a buttercream rose

1. Fit a piping bag with a rose tip. Attach a small square of parchment paper to the top of a rose nail with a small dot of icing to make it easier to remove the rose once the icing has set. Hold the piping bag in your dominant hand and the rose nail in the other. Hold the bag so that the opening in the piping tip is vertical and the wider end is at the bottom.
2. The rose will be built on a cone of icing. To make the cone, place the wide end of the piping tip on the surface of the nail, with the narrower end angled slightly inward. Squeeze the bag while turning the nail clockwise, keeping the piping bag and tip in the same position.
3. To form the first inner petal of the rose, place the wide end of the tip on the cone of icing, with the narrower end angled slightly inward. Squeeze the piping bag while pulling it away from the cone, creating a ribbon of icing; at the same time, turn the rose nail counterclockwise, wrapping the ribbon of icing up and around the inner cone, ending by overlapping the point at which you began piping.

4. To form the first row of three petals, place the wide end of the piping tip near the base of the inner petal, with the narrow end pointing straight up. Position the first petal over the opening of the inner petal: Pipe a ribbon of icing around and down, turning the nail counterclockwise one-third of a turn at the same time. Form the next two petals following the same procedure, beginning each petal near the center of the previous one.
5. For a larger rose, keep adding rows of petals in the same manner, increasing the number in each row and always adding an odd number of petals to keep the rose from looking square or boxy.
6. Once the icing is set, remove the rose from the nail. Use a small metal spatula to remove the rose from the paper and place it as desired.



LEFT: Creating the inner cone of icing MIDDLE: Piping the first petals RIGHT: Adding petals

Working with royal icing

Royal icing décor is typically piped on parchment or plastic sheets, allowed to dry, and stored in airtight containers for later use. Royal icing is easily colored using food coloring or by air-brushing it. Generally, royal icing is not intended to be consumed, at least in any measurable quantity, as it has no flavor and is only sweet.

Care must be used in handling royal icing. When exposed to air, the icing dries quickly, becoming hard and brittle. If any of the dried icing gets incorporated into the icing being used for décor work, the hardened particles will block the piping tip. For this reason, it is always good practice to keep the sides of the container holding the icing clean. Remove any dried

particles of icing from the sides of the container promptly with a clean damp cloth before they can fall back into the icing. While you work, keep a clean, damp paper towel directly on the surface of the icing in the container to prevent a crust from forming.

Store royal icing under refrigeration with a piece of plastic wrap or a dampened paper towel placed directly on the surface. Cover the bowl or container tightly with plastic wrap to keep it airtight.

For piping royal icing, a small parchment cone may be used, but for intricate work, a very fine round writing pastry tip is usually best. The tip facilitates the production of a perfectly formed bead of icing, which in turn will enhance the quality of the décor.

Royal icing is often used to execute elaborate designs that are then dried and fitted or otherwise secured onto cakes and décor pieces. Usually a template or pattern is used to make this type of décor. Place the template or pattern under a piece of acetate or other food-safe plastic and secure it with tape or paper clips so it does not slip as you pipe the figure by tracing the template. Using a template ensures consistent results, and the technique is especially useful when the same pattern is to be repeated on a cake or décor piece.

When making large or very intricate patterns, it is usually necessary to pipe more than one layer of royal icing. Pay close attention to any connecting points or joints to ensure the finished piece will be strong enough to be lifted from the plastic and secured to the finished cake or other object. As you are planning the pattern of loops, keep in mind that loops that cross, intersect, or lie on top of one another result in greater stability of the sugar work.

Another technique often used with royal icing is called flood work. To do flood work or to make a run-out, an outline of a pattern or motif is piped onto acetate and allowed to dry until firm. Then thinned royal icing is used to fill in the interior of the pattern. This icing should be thin enough to fill in the design easily, with little extra manipulation or spreading necessary, minimizing the chance that any lines or imprints will be left in the finished piece. A good way to test the consistency of royal icing for flood work is to have the icing in a container, spoon some out, and allow it to drip back into the container. The drips going back into the container should disappear without a trace at the count of ten.



Filling an outlined shape with royal icing

Flood work and run-outs with royal icing

1. Outline each shape with a thin line of piped royal icing. Allow the icing to dry.
2. Thin the remaining royal icing with water until a small amount dropped back into the bowl from the tip of a spoon flattens back into the surface in 10 seconds. Color the icing as desired.
3. Fit a piping bag with a #2 plain tip. Fill the bag halfway with the royal icing. To fill the outlines with icing, begin at the edges of each one and work toward the center. At the edge of the shape, hold the tip a short distance away from the piped outline and allow the icing to flow toward the outline, creating a rounded edge. Continue piping, allowing each successive pass of icing to flow into the previous one, creating a smooth surface.
4. Place the shapes under a heat lamp or other heat source to dry. The more quickly the icing dries, the shinier the finish.

String work with royal icing

1. Thin the royal icing to a medium-thick consistency. Strain it through a double layer of cheesecloth.
2. Fit a pastry bag with a #0 or #00 plain tip. Fill the bag halfway with the royal icing. Test the consistency of the icing by piping a string. If the icing is too soft, it will sag and break under its weight; if the icing is too stiff, it will not fall into a smooth string. Adjust the consistency of the icing if necessary with confectioners' sugar, water, or additional egg whites.
3. Touch the tip of the pastry tip to the first attachment point, then pull the bag away while applying even pressure to it, allowing the string of icing to fall away from the tip. Do not move the tip downward; simply allow the icing to fall in a smooth curve. When the loop of icing is the desired length, touch the tip of the pastry tip to the next point to attach the string.
4. Repeat the process, using care to produce loops of the same length each time. As you are planning the pattern of loops, keep in mind that loops that cross, intersect, or lie on top of one another result in greater stability of the sugar work.



Creating a string with royal icing

Overpiping

The overpiping technique is mostly seen in England and is their most used piping discipline. When a cake is displayed with the overpiping technique, it gives a shadowing effect and gives the piping height because it is stacked. This is an elegant approach for most cakes. Because the piping has eye appeal, it's striking for merchandising displays.

There are many borders that can be overpiped. Whatever border you identify, be sure to make the first layer of piping as straight as possible. Once you have established a solid first line, the rest of the lines that you will be stacking should be straight.

When overpiping using royal icing, as demonstrated, you should identify a series of round tips suitable for the application. In most cases a #3 tip for the base line is good to start with. When you start to stack the lines, identify the next smaller tip in the series of tips, in this case a #2. Follow this method of tip selection until you reach the desired finish to your stack. There are tips that are as fine as #00.

Do not overfill the parchment bag with icing. When piping with a small tip, a half-ounce of icing per bag should cover one surface of the cake. Each time you fill a small parchment bag with icing it should be worked to a smooth consistency.



Overpiping technique

Tempered chocolate décor

Using tempered chocolate (which will harden) rather than melted chocolate for piping enables the confectioner or pastry chef to pipe designs onto parchment paper, allow them to set firm, and then remove them from the paper and place them as desired on finished products for ornamentation and garnish. Because the piped details will become rigid once set, they can be made ahead and stored for later use. In addition, tempered chocolate designs can be used for numerous décor effects, as they do not have to lie flat. When piping tempered chocolate, use a small parchment cone, because the chocolate can easily harden in the cone if the environment is cool.

Piping chocolate filigrees and writing

1. Make a parchment cone and fill it no more than halfway with piping chocolate. Fold over the top and cut a tiny hole in the tip of the cone.
2. Touch the tip of the cone to the surface on which you are piping and, exerting even pressure, pull the cone up and away from the surface to create a string of chocolate. Keeping the piped string of chocolate constant and even, move the parchment cone slowly and evenly to control the way in which the string falls onto the surface. To create small loops in the filigree or writing, for example, pause at the top of the piped element and allow the string to fall in a small loop.
3. To end a motif or word, touch the tip of the parchment cone back to the surface.

Tempered chocolate stencils and cutouts

Stencils and cutouts have many applications. They can be used as a garnish for a pastry, cake, or plated dessert, as the base for piped confections, or, in décor work, as either the focal point or a component of a larger display piece.

Stencils and cutouts may be made of white, milk, or dark chocolate. Generally, the chocolate should be spread thin, but the exact thinness will depend on the intended use.

Making chocolate triangles (spread-and-cut method)

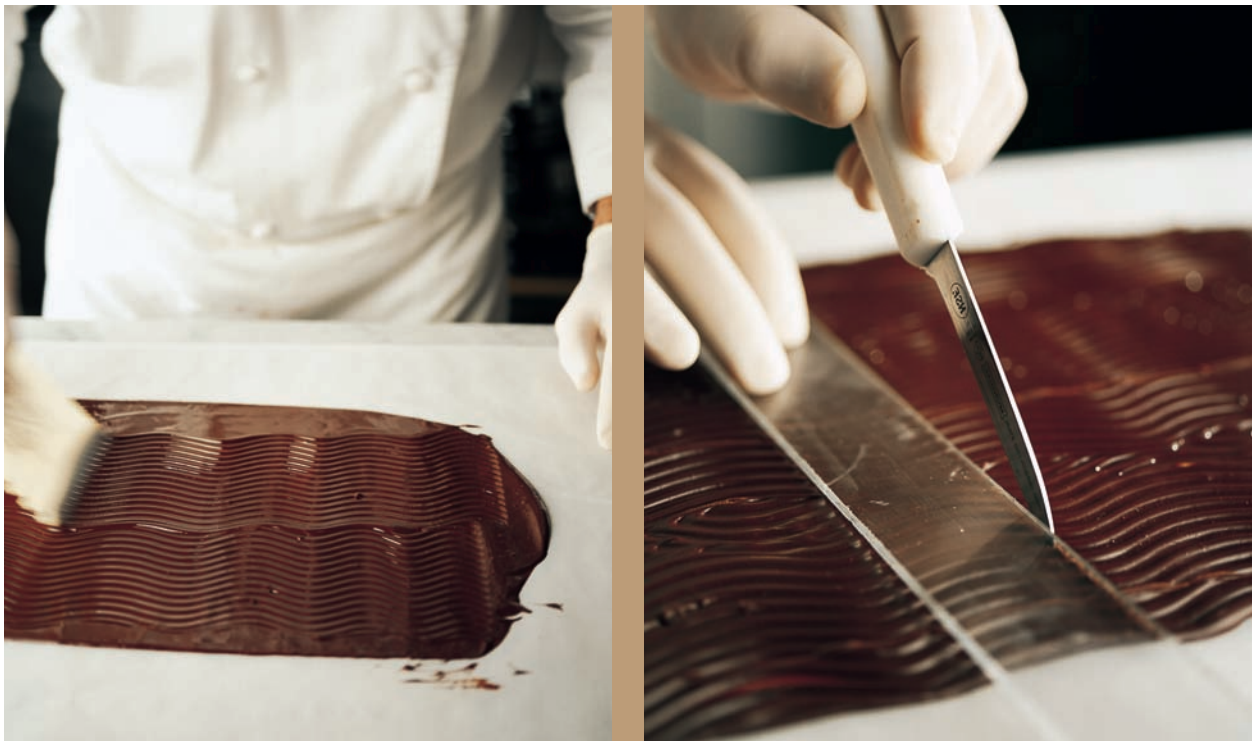
1. Pour tempered chocolate onto a sheet of parchment paper. With an offset spatula, spread the chocolate into a thin, even layer. Allow the chocolate to set slightly.
2. Run a cake comb lengthwise through the chocolate in a wave pattern, slightly overlapping each pass so that there are no uncombed areas of chocolate. Try to keep the thickness of the chocolate even throughout.
3. Allow the chocolate to set until it becomes fudgy. It should be soft enough that you can draw a knife point through it without cracking but set enough so that the cut does not refill with chocolate.
4. Using a ruler and the point of a paring knife, cut the chocolate into triangles with $1\frac{3}{4}$ -in/4-cm sides and a 4-in/10-cm base: First cut the sheet of chocolate lengthwise into strips 4 in/10 cm wide. Then mark the edges of each strip at intervals of $1\frac{3}{4}$ in/4 cm. Using the ruler, connect the marks on the diagonal to make triangles.

5. Slide the sheet of chocolate onto the back of a sheet pan. Place another sheet of parchment paper on top of the chocolate. Place a second sheet pan, bottom side down, on top of the parchment paper. Grasp both sheet pans firmly and flip the sheet pan sandwich over. Remove what is now the top sheet pan. The parchment paper on which you spread the chocolate is now facing up. Carefully peel this parchment paper away from the chocolate triangles, starting at one corner. Removing the parchment paper at this point allows the chocolate to set completely without curling.

NOTES For a very shiny finished surface, spread the chocolate onto a sheet of acetate rather than parchment paper. When cutting the partially set chocolate into triangles, cut completely through the acetate. Leave the chocolate triangles on the acetate until time for service so that the surface does not become marred. Do not touch the shiny surface of the chocolate, as it will pick up fingerprints readily.

Any shapes can be cut out of spread chocolate, with or without combing it first. You can use ring cutters to make disks, or templates made out of stiff plastic or paper.

If desired, stripe the chocolate in the same manner as for striped chocolate cigarettes (page 830).



Combing the chocolate

Cutting out triangles when the chocolate is almost set

Making striped chocolate triangles

1. Cut two strips of acetate 6 by 18 in/15 by 46 cm.
2. Spread white chocolate $\frac{1}{8}$ in/1.5 mm thick over one of the strips. Using the smallest side of a square-toothed cake comb, comb through the white chocolate to create a zigzag pattern. Allow the chocolate to set slightly.
3. Spread dark chocolate thinly and evenly over the white chocolate. Transfer the acetate strip to a cutting board and allow the chocolate to set for 10 seconds.
4. Place the other acetate strip on top of the dark chocolate. Cut the strip lengthwise in half to make two strips 3 in/8 cm wide. Cut triangles with a base 1 in/3 cm wide out of each strip.
5. Place another cutting board on top of the triangles to keep them flat. Allow the triangles to set for a minimum of 3 hours. Remove the acetate from the triangles when you are ready to use them.

Making marbled chocolate plaques

1. Drizzle tempered white chocolate, milk chocolate, and dark chocolate onto a sheet of acetate, overlapping the different colors of chocolate. With a long offset spatula, spread the chocolates into thin, even layers, allowing them to merge and flow together. Do not mix the chocolates too vigorously, or the finished plaques will look muddy instead of attractively marbled.
2. Allow the chocolate to set until it becomes fudgy. It should be soft enough that you can draw a knife point through it without cracking but set enough so that the cut does not refill with chocolate.
3. Using a ruler and the point of a paring knife, cut the chocolate into rectangles 2 by $2\frac{3}{4}$ in/5 by 7 cm: First cut the sheet of chocolate lengthwise into strips $2\frac{3}{4}$ in/7 cm wide. Then mark the edges of the strips at intervals of 2 in/5 cm. Using the ruler, connect the marks from top to bottom.
4. Slide the sheet of chocolate onto the back of a sheet pan. Place another sheet of parchment paper on top of the chocolate. Place a second sheet pan, bottom side down, on top of the parchment paper. Grasp both sheet pans firmly and flip the sheet pan sandwich over. Leave the sheet pans stacked until the chocolate is completely set. Leave the chocolate rectangles on the acetate until you are ready to use them.

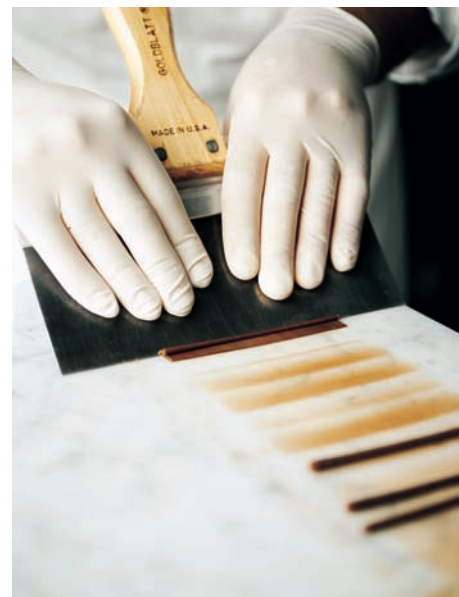
Making chocolate cigarettes

1. Drizzle a thin line of tempered chocolate onto a marble surface, parallel to the edge of the marble. Using an offset spatula, spread the chocolate in a thin, even layer. Let the chocolate set slightly.
2. When the chocolate is somewhat set, place a Plexiglas strip the width of the desired finished length of the cigarettes on top of the chocolate and evenly trim the edges of the chocolate strip with a bench scraper or putty knife.

3. With the bench scraper or putty knife, begin scraping cigarettes from one short end of the chocolate strip with a quick, abrupt motion; it should feel as though you are trying to scrape off a thin layer of marble. If the chocolate is not set enough, the cigarettes will not curl properly; and if the chocolate has set too much, the cigarettes will crack and break. Chocolate that is just slightly too cool can be warmed with the palm of your hand.
4. To trim the cigarettes, warm a sharp knife. Place the blade at the desired point and allow the heat of the knife to melt the chocolate.

Making mini-cigarettes

1. Spread tempered chocolate on a marble surface no wider than the width of the tool you will be using to form the cigarettes, or, when the chocolate is somewhat set, use the tip of a paring knife to score the chocolate into narrow strips. Let the chocolate set briefly.
2. Using the same motion as described above, scrape the chocolate into mini-cigarettes. It is important to scrape the chocolate with a motion directly parallel to the length of the strip; otherwise, the mini-cigarettes will curl into each other and be difficult to separate.



Forming dark chocolate cigarettes

Making striped chocolate cigarettes

1. Drizzle a small amount of tempered white chocolate onto a marble surface. With an offset spatula, spread the chocolate in a strip parallel to the edge of the marble. Allow the chocolate to set until thick in consistency.
2. Draw a square-toothed cake comb firmly through the chocolate, scraping all the way down to the marble to make thin lines of chocolate. Try to keep the lines of chocolate straight and parallel to the edge of the marble.
3. Working quickly, drizzle dark chocolate over the white chocolate and spread it thinly and evenly with an offset spatula. The dark chocolate should fill the channels left in the white chocolate by the comb; spread it thin enough so that the white chocolate shows through the dark chocolate.
4. When the chocolate is no longer tacky but still pliable and somewhat soft, place a Plexiglas strip the width of the desired finished length of the cigarettes on top of the chocolate and evenly trim the edges of the chocolate strip with a bench scraper or putty knife.
5. With the bench scraper or putty knife, begin scraping cigarettes from one short end of the chocolate strip with a quick, scraping motion; it should feel as though you are trying to scrape off a thin layer of marble. If the chocolate is too warm, the cigarettes will not curl properly; and if the chocolate is too cool, the cigarettes will crack and break. Chocolate that is just slightly too cool can be warmed with the palm of your hand.



Backing the striped white chocolate with dark chocolate

6. To trim the cigarettes, warm a sharp knife. Place the blade at the desired point and allow the heat of the knife to melt the chocolate.

VARIATION MARBLED CIGARETTES Marble the chocolate as for marbled chocolate plaques, then shape as for chocolate cigarettes.

Making chocolate fans

1. Fill a parchment piping cone with tempered chocolate. Pipe four or five quarter-size rounds of chocolate onto a parchment-lined sheet pan, spacing the rounds about 4 in/10 cm apart.
2. With the back of a spoon, spread chocolate across the parchment paper in an arc away from one round of chocolate. Repeat the motion four more times, beginning each arc at approximately the same point and making each arc shorter than the one before it, slightly overlapping the arcs. This motion creates a “fan” of chocolate with two ridges in it. Do not make the chocolate too thin or the fan will break. The base of the fan should be thicker than the top edges. Repeat with the remaining rounds of chocolate. Allow the chocolate to set completely.
3. The fans can be used as they are, or the top edges can be neatened with a warmed round metal cutter.

Making chocolate bands

1. Place a strip of acetate the desired width of the chocolate band on a marble surface or piece of parchment paper. Drizzle tempered chocolate onto the acetate. With an offset spatula, spread the chocolate thinly and evenly over the entire surface of the acetate; some of the chocolate should go over the long sides of the acetate.
2. Allow the chocolate to set slightly, so that the acetate can be picked up without the chocolate running. The chocolate should still be fluid enough to adhere to the surface or item where it is applied.
3. Pull up a corner of the acetate, then carefully lift up the acetate strip and apply the chocolate band to the desired surface. Place the band carefully, starting with one end; once it touches the surface, it cannot be moved without damaging the chocolate.
4. Peel away ½ in/1 cm of the acetate from the end you first attached, and overlap the other end of the band so that the chocolate adheres to itself. While the chocolate is still slightly tacky, use scissors to trim the acetate and the chocolate where it overlaps.
5. To preserve its shiny finish, leave the acetate on the chocolate until time for service.

Making chocolate shavings

1. Brace a large block of tempered chocolate against the near edge of a parchment-lined sheet pan.

2. Hold a sharp chef's knife so that the flat of the blade is straight up and down and the tip of the blade is pointing to your left. Using a smooth scraping motion, pull the blade across the surface of the chocolate, without digging the blade into the chocolate. To create small shavings, use a short scraping motion; for larger shavings, use a longer motion.
3. Use an offset spatula to move the shavings. Do not pick up the shavings with your hands or they will melt.

Making chocolate ruffles

1. Place a sheet pan in a low-temperature oven until it is just warm. Have ready a bowl of melted but not tempered chocolate that is also warm (just above body temperature). The chocolate and the sheet pan should be approximately the same temperature.
2. Pour the chocolate onto the back of the sheet pan and spread it thinly and evenly with an offset spatula, covering the back of the pan completely.
3. Place the sheet pan in the freezer until the chocolate is set but still malleable. (If the chocolate becomes too hard, remove the pan from the freezer and allow it to sit at room temperature until the chocolate is malleable.)
4. Brace the sheet pan against a wall or the backsplash of a counter. Using a bench scraper or putty knife, begin scraping the chocolate off the sheet pan in long strips. As you scrape, use your other hand to gather one of the long edges of the chocolate strip to create a ruffle.
5. Store the ruffles in a cool, dry place.

Working with modeling chocolate

Modeling a chocolate rose

1. Each rose will need approximately 4 oz/33 g of modeling chocolate. Knead the modeling chocolate until it is pliable.
2. Shape about one-quarter of the modeling chocolate into the center of the rose by shaping it into a cone and then rolling the tip of the cone on the work surface so it is thin. Flatten the bottom of the center so that it stands up on its own.
3. Roll out the remaining modeling chocolate on the baking mat until it is $\frac{1}{16}$ in/1.5 mm thick.
4. Cut out 10 circles with the $1\frac{1}{4}$ -in/3-cm cutter. Remove the excess modeling chocolate and wrap it tightly in plastic wrap. Cover the circles with plastic wrap.
5. Two of the rounds will be used to make the bud. Attach the first petal by connecting it to the tip of the base and then wrapping it around. Smooth the base of the petal into the center of the flower. Repeat this process with the other petal. For a more realistic appearance, tuck each petal inside the previous one so they overlap slightly.

6. The next row needs three petals that are attached to the bud and slightly overlap. Curl back the edge of one side of each petal and attach the petals so the uncurled side is tucked into the previous petal.
7. You can repeat this process with another row of five petals.

NOTE These same techniques can be applied to making roses out of marzipan and gum paste, as shown in the illustration on page 835.

Modeling chocolate leaves

1. Knead a small amount of modeling chocolate until it is pliable.
2. Roll out the modeling chocolate on a silicone baking mat until it is 1/8 in/3 mm thick. Cut out the leaves with the leaf cutter. Gather the excess modeling chocolate and wrap it tightly in plastic wrap so it does not dry out. Cover the leaf cutouts with a piece of plastic wrap.
3. Dust the leaf veiner with cocoa powder if you are using dark or milk modeling chocolate, or cornstarch if you are using white modeling chocolate.
4. Vein each leaf and store on a parchment-lined sheet pan.
5. Once they are dry, brush off any excess cornstarch or cocoa powder.

NOTES If you do not have a leaf veiner, shape the leaves by draping them over an egg carton. This will bend and shape them to make them look more realistic.

This method may be used for gum paste as well.

Working with marzipan

Marzipan is a paste made of ground almonds and sugar. The best-quality marzipan, made with fresh nuts and the proper proportion of sugar, has a fresh, natural flavor. Marzipan can be used as a center (to be enrobed in chocolate) or as a confection by itself.

There are a number of methods for making marzipan, but for the small-scale confectioner, the classic French method is the most practical. The nuts are coarsely ground, and a syrup of sugar, water, and glucose is boiled to the appropriate temperature. The cooked syrup is poured over the nuts and they are spread on a lightly oiled marble surface to cool. Once cooled, the sugar-coated nuts are ground to a paste consistency.

The ratio of almonds to sugar varies depending on the intended use of the finished product, as does the temperature to which the syrup is cooked—the hotter the syrup, the firmer the marzipan. For confectionery work, the syrup is usually cooked to 257°F/125°C to make a firm marzipan. The syrup for a pâtisserie marzipan, which is used for fine décor work, is cooked only to 246°F/119°C, resulting in a softer marzipan. Marzipan should be ground in a *mélangeur*, a special machine with adjustable marble rollers. The *mélangeur* produces the smoothest possible finished product. However, if a *mélangeur* is unavailable, a food processor is acceptable.

When marzipan is ground without sufficient moisture, it will separate and appear oily. If this occurs, add a small amount of liquid, either a spirit or syrup, to the marzipan to return it to the proper consistency. The liquid enables the marzipan to reabsorb the oil that has separated out. It may also be necessary to add a small amount of confectioners' sugar.

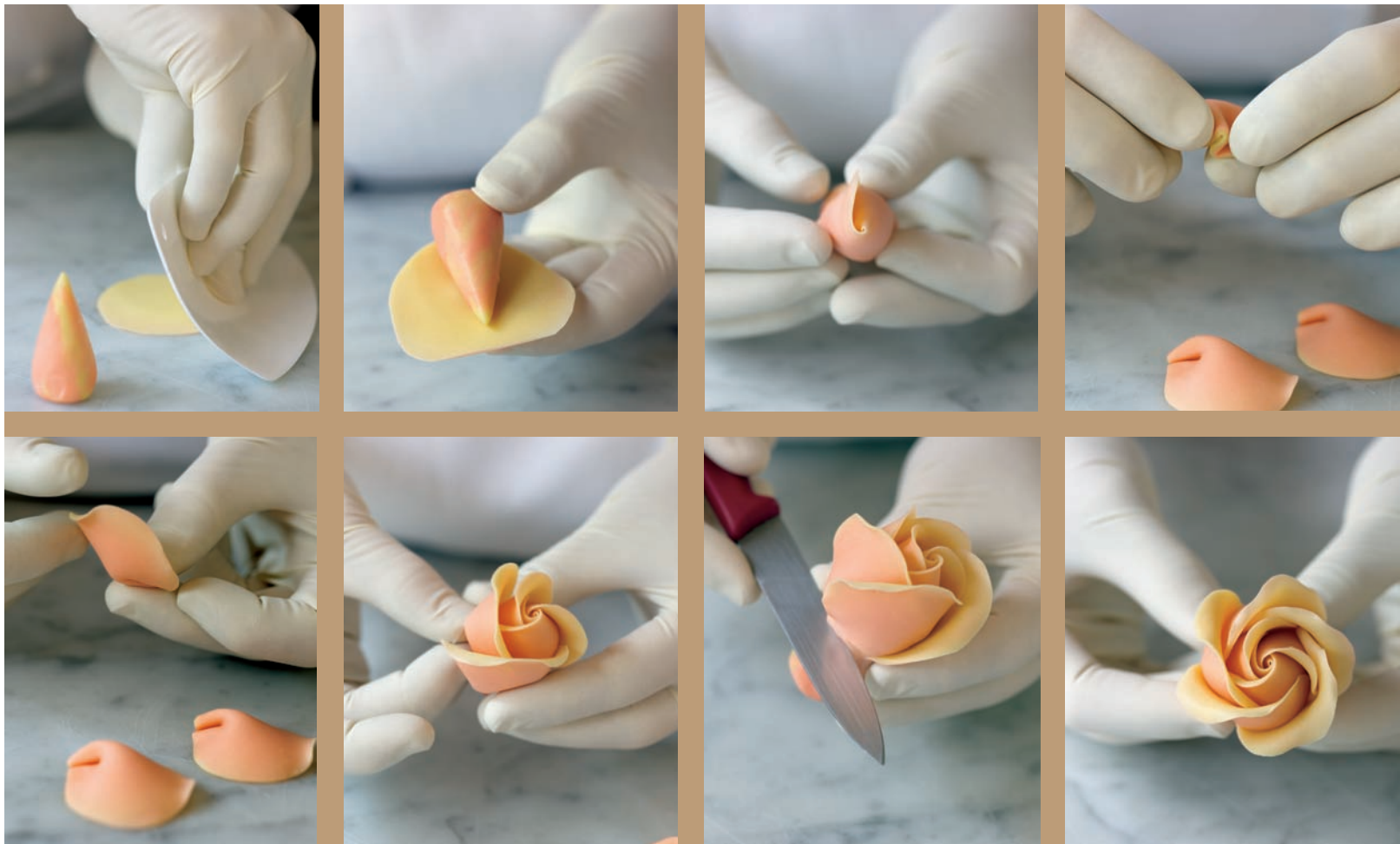
Marzipan should be firm but not dry or brittle. To fix marzipan that is too hard or dry, massage in a few drops of liquor or glucose. To fix marzipan that is too brittle, for each 2 lb 4 oz/1.02 kg of marzipan, massage in a piece of fondant approximately the size of a walnut. If the marzipan is so soft that it sticks to your hands or the work surface, massage in confectioners' sugar or a mixture of equal parts powdered milk and cornstarch. You can replace from 25 to 50 percent of the almonds in marzipan with other nuts such as hazelnuts or pistachios.

Marzipan flower cutouts

1. On a surface dusted with confectioners' sugar, roll a piece of marzipan with a small rolling pin to between $\frac{1}{8}$ and $\frac{3}{8}$ in/1.5 and 3 mm thick.
2. With a small flower cutter, cut out flower shapes from the marzipan. With the small end of a marzipan ball tool, press the center of each flower into a piece of urethane foam to create an indentation in the center of the flower.
3. To make centers for the flowers, shape small pieces of marzipan into tiny balls and place one in the indentation in each flower. Position the centers while the marzipan is still soft so that they will stay in place.
4. To create layered flowers, cut flower shapes with different sizes of cutters and different colors of marzipan. Stack the shapes and press them into the foam at the same time.

Making a marzipan rose

1. Form a small piece of marzipan into a cylinder about $1\frac{1}{2}$ in/4 cm long and $\frac{1}{2}$ in/1 cm in diameter. Make an indentation in the cylinder approximately two-thirds of the way down the cylinder. Taper the cylinder to a point. Stand this cone on your work surface, pressing gently so that the bottom adheres to the surface.
2. Form a piece of marzipan into a rope approximately $\frac{1}{2}$ in/1 cm in diameter. Cut it into four pieces and roll them into small balls about $\frac{1}{2}$ in/1 cm in diameter.
3. Place the balls on a marble surface, about $2\frac{1}{5}$ cm away from the front edge of the marble. Using a plastic bowl scraper, flatten the front edge of each ball with three short strokes. Use a smooth motion, pushing down on the marzipan and pulling the scraper toward you in one motion. The front edge of the marzipan petals should be very thin but the back edge should remain quite thick. (The difference in thickness will allow you to form a delicate-looking rose that will still support its own weight.)
4. Holding the blade of a clean, sharp slicer flat against the marble, cut each petal off the marble. Make a small cut in the center of the thick edge of each petal, then overlap the resulting two sections and press them together to form a cupped shape.
5. To form the first inner petal of the flower, place one petal on the prepared marzipan cone, with the thin edge at the top and the thick edge at the indentation in the cone. Hold the petal tightly against the cone and wrap it all the way around the cone so that the edges overlap. The highest point of the petal should be just above the tip of the cone. There should be a tiny hole at the top of the wrapped petal, but the cone should no longer be visible. Use your fingers to gently turn back a small section of the top edge of the petal. Gently squeeze the bottom of the petal into the indentation in the cone.



TOP ROW: Form a cone and press to adhere to the work surface. Using a plastic bowl scraper, flatten and shape balls to make petals.

To form the first inner petal of the flower, place one petal on the prepared marzipan cone, with the thin edge at the top and the thick edge at the indentation in the cone.

Wrap the petal tightly all the way around the cone so that the edges overlap. Use your fingers to gently turn back a small section of the top edge of the petal.

Make a small cut in the center of the thick edge of each petal, then overlap the resulting two sections and press them together to form a cupped shape.

BOTTOM ROW: Use your fingers to gently turn back a small section of the top edge of the petal.

Position the formed petals around the cone, or center of the rose.

Gently squeeze the bottom of the rose to create a rounded base. Cut the extra marzipan away from the base.

Allow the rose to dry at room temperature.

6. Use the remaining three petals to form the first layer of rose petals. Place one of these petals on the rose, with its center in line with the edge of the first petal. The top of this petal and the subsequent ones should be even with or just slightly above the top of the inner petal. Press the bottom left side of the petal into the rose, leaving the right side open.
7. Position the other two petals in the same fashion, so that their centers line up with the previous petal's left edge, and gently curl the thin right edge of each petal back with your finger. The third petal's left edge should nestle inside the first petal's open right

side. Gently press all the petals' bottom edges together and squeeze the bottom of the rose into the indentation in the cone, forming a rounded bottom to the rose.

8. Make another slightly thicker snake out of marzipan and cut it into five pieces. Form these into balls and then petals in the same fashion as above.
9. Use these five petals to form the second layer of rose petals. Place them on the rose in the same fashion, but with each petal overlapping the previous one by only about one-third. The tops of these petals should also be even with or just slightly above those of the previous petals. Gently curl each side of these five petals back and create a crease or point in the middle of the petal.
10. If desired, add another layer of seven petals to the rose.
11. Gently squeeze the bottom of the rose to create a rounded base. Cut the extra marzipan away from the base. Allow the rose to dry at room temperature.

Marzipan plaques

1. Dust a work surface with confectioners' sugar. Roll a piece of marzipan to $\frac{1}{16}$ in/1.5 mm thick using a small rolling pin.
2. Using a cutter or a template and sharp paring knife, cut a circle, oval, or other desired shape out of the marzipan.
3. Lay the plaque on a flat surface and, using your fingers and the palm of your hand, buff and smooth the cut edges and the top surface of the plaque, being careful not to crack or break the marzipan.
4. Place the plaque on a parchment-lined sheet pan and allow to dry at room temperature until it is completely hard. Use an emery board or very fine sandpaper to smooth any rough edges. Pipe lettering on the plaque or decorate as desired.

NOTE This method may be used for pastillage as well.

Sugar work

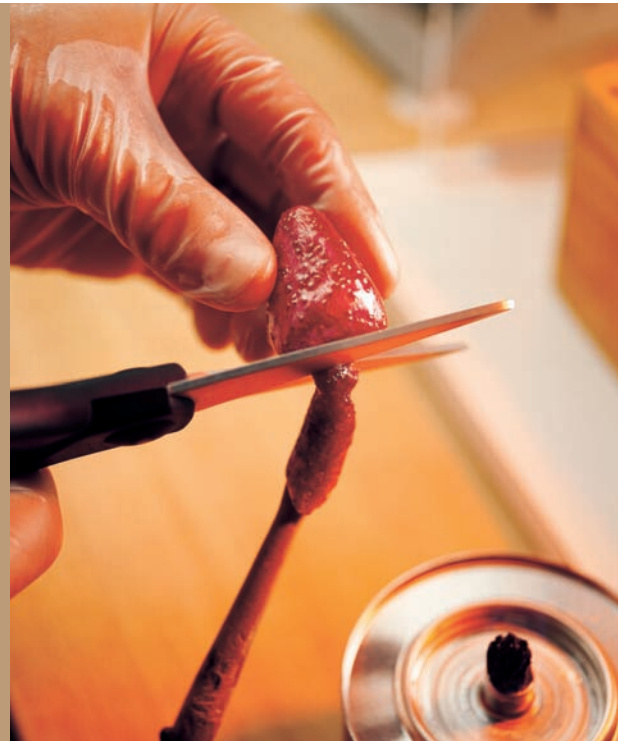
Making blown sugar strawberries

1. Warm a piece of red sugar in the microwave until it is hot and pliable but not so hot that it is fluid; check it frequently to ensure that it does not become too hot in one place while it is still hard in another.
2. Place the sugar under a heat lamp. Knead a small amount of crystal sugar into it to create the look of strawberry seeds.
3. Make a "foot" of sugar on the pipe by wrapping a small piece of sugar around the tip of the pipe, so the sugar strawberry will adhere to the pipe. Knead and pull the remaining sugar with your hands until it is a consistent texture and temperature. With your open right hand, grasp the piece of sugar and then close your hand, forcing a round ball of sugar out through your closed thumb and forefinger. Cut this ball away from the main piece of sugar.

4. Push your finger down into the center of the ball of sugar, creating an indentation. Make sure the thickness of the sugar is the same all the way around the indentation; if it varies in thickness, the sugar is more likely to blow out in a thin spot.
5. Heat the foot of sugar on the sugar pump over a Sterno flame, then place the ball of sugar on the tip of the pipe, being sure to leave enough space inside the indentation above the end of the pipe so that air will be able to come out of the pipe. Squeeze and press the base of the sugar ball around the end of the pipe, attaching it to the sugar foot.
6. Hold the ball of sugar in one hand and squeeze the pump with the other until the ball of sugar expands. Stop pumping and shape the sugar into a strawberry with your hands; at the same time, mold a thick stem at the base of the strawberry that protrudes above the end of the pipe. Continue to alternately pump air into the strawberry and shape it until it is the shape and thickness desired. The thinner the walls of the strawberry, the shinier the sugar will be when it cools.
7. Cool the strawberry under a blow-dryer. To cut the strawberry away from the pump, heat just the thick stem over the Sterno flame. Place the open blades of a pair of scissors around the stem and slowly and gently close them until the sugar cracks.



Shape the strawberry with your fingers.



Gently cut the strawberry off the pipe.

Making straw sugar

1. Warm a piece of sugar in the microwave until it is hot and pliable but not so hot that it is fluid; check it frequently to ensure that it does not become too hot in one place while it is still hard in another.
2. Place the sugar under a heat lamp. Cut a piece approximately 1½ by 6 in/4 by 15 cm from the piece of sugar. Pull it into a long cylinder. Fold the cylinder in half and bring the ends together, allowing the two halves to touch along their long sides and adhere to each other. Repeat two or three times.
3. Holding the piece of sugar at either end, fold it into a tube, allowing the long sides to adhere. From this point on, it is important to handle the sugar gently and touch the center of the piece as little as possible to retain the long tubes of air that you are building into the sugar. Fold the tube in half, as in step 2, and allow the long sides to adhere to each other. Repeat two or three times.
4. Repeat step 3 two more times, handling the sugar by the ends as much as possible.
5. Pull the sugar into a long cylinder and bend and shape it as desired. If the sugar is still warm enough, you can cut the ends with scissors. If it is too cool, warm the section to be cut over a Sterno flame and then cut carefully with scissors. Cool the sugar with a blow-dryer.



LEFT: Joining the long sides of the sugar

MIDDLE: Forming the sugar into a tube

RIGHT: Heating a small lump of sugar in order to attach a flower to the straw sugar

Making a pulled sugar blossom

1. Warm a piece of white sugar in the microwave until it is hot and pliable but not so hot that it is fluid; check frequently to ensure that it does not become too hot in one place while it is still hard in another.
2. Place the sugar under a heat lamp. With both hands, grasp the sugar firmly at the opposite ends of the piece and pull your hands apart, pulling the sugar to form a thin edge. This thin edge is important because it is the thinness of the petals' edges that will give the flowers a delicate appearance.
3. Place the piece of sugar on the edge of a sugar workbox with the thin pulled edge protruding over the edge. With the index finger and thumb of your right hand, grasp the thin edge of sugar and pull it down. With the index finger and thumb of your left hand, pin the sugar directly above your right thumb. With a short, sharp movement, pull your right hand away while pinning hard with your left. This will create a tapered, rounded petal. Repeat the process until you have five matching petals.
4. To assemble the flower, heat the tapered end of one petal over a flame. Place it next to another petal, overlapping the edges. Repeat with the remaining petals, overlapping them evenly. Heat the last petal until it is pliable enough that its edge can be slipped under the edge of the first petal. Cool the flower with a blow-dryer.
5. To make the stamen for the flower, warm a piece of light yellow or gold sugar in the microwave. Cut off a small piece of the sugar with scissors. Pull the piece of sugar into a very thin strand. Working quickly, bring the ends of the strand together to create a large loop. Loop the strands twice more, and pin them together about $\frac{1}{2}$ to $\frac{3}{4}$ in/1 to 2 cm below the tops of the loops. The sugar should still be warm enough so that the strands adhere to one another. Cut the loops open with scissors.
6. Place the blades of the scissors at the point where the strands are pinned together and use the scissors to gently break the sugar. Heat this pinned end in the Sterno flame and attach it to the center of the flower.



TOP LEFT: Pulling the sugar into a thin edge
BOTTOM LEFT: Placing the petals on the flower

TOP RIGHT: Pulling the thin edge down and away
from the sugar
BOTTOM RIGHT: Pulling the flower stamen

Making pulled sugar leaves

1. Warm a piece of light green sugar in the microwave until it is hot and pliable but not so hot that it is fluid; check frequently to ensure that it does not become too hot in one place while it is still hard in another.
2. Place the sugar under a heat lamp. With both hands, grasp the sugar firmly at the opposite ends of the piece and pull your hands apart, pulling the sugar to form a thin edge. This thin edge is important because it is the thinness of the leaves' edge that will give them a delicate appearance.
3. Place the piece of sugar on the edge of a sugar workbox with the thin pulled edge protruding over the edge. With the index finger and thumb of your left hand, grasp the thin edge of sugar and pull it down and away. Cut the sugar strip at an angle with scissors to create a leaf shape.
4. Immediately place the sugar piece into the bottom half of a silicone leaf mold and press down on it firmly with the top of the mold. Then remove the leaf from the mold and, while it is still warm, pin the thicker end of the leaf slightly. Curve the leaf slightly to make it look more realistic. Cool under a blow-dryer. Repeat to make more leaves as needed.
5. To attach the leaves, heat the thicker end of each leaf over a flame. Press the heated end of the leaf to a base stem or petal and cool the joint with a blow-dryer.



LEFT: Cutting the pulled sugar at an angle
MIDDLE: Removing the leaf from the mold
RIGHT: Attaching the leaf to the sugar piece

Making a pulled sugar ribbon

1. Warm one piece of white sugar and one piece of red sugar in the microwave until they are hot and pliable but not so hot that they are fluid; check frequently to ensure that the sugar does not become too hot in one place while it is still hard in another.
2. Place both pieces of sugar under a heat lamp. Cut off five pieces of white sugar, each approximately $\frac{3}{4}$ by 3 in/2 by 8 cm. Cut off two pieces of red sugar of approximately the same size. Lay the pieces of sugar in a row in this order: white, red, white, white, white, red, white; place the pieces close together so that they adhere to one another.
3. Pull the sugar band lengthwise until it is long enough to double back on itself. Bring the two ends of the sugar together and allow the long sides of the sugar to adhere to each other. Flatten the piece of sugar into a wide, thick ribbon.
4. Grasping one end of the ribbon in your left hand, begin pulling the ribbon out with your right hand. Apply pressure evenly, using your right hand to smooth out the length of the ribbon until you have created a very thin, delicate ribbon.
5. When the ribbon is the desired length and thickness, trim the ends at an angle with scissors. If necessary, warm the ribbon slightly under the heat lamp to shape and curve it as desired.

NOTE For ribbons of three or more colors, simply add more colors of sugar in the same manner. The colors can be arranged in any sequence, but ribbons tend to look prettier if the different colors are separated by white sugar.



LEFT: Beginning to pull the ribbon

MIDDLE: Lengthening the ribbon

RIGHT: Shaping the ribbon

Working with sugar pastes

Pastillage is a pure white sugar paste. It is not sensitive to ambient humidity, making it possible to assemble pieces well in advance and hold them at room temperature. Pastillage should not be refrigerated. Sugar paste décor may be made in advance and stored almost indefinitely in controlled conditions of temperature and humidity. Gum paste and pastillage are essentially the same medium; however, gum paste is more elastic and may be rolled thinner and manipulated more easily without cracking. Most gum paste and pastillage décor elements should be dried overnight before use. When working with sugar pastes, the work surface and all tools must be kept clean and free of any debris, as the white paste accentuates any impurities. Keep sugar paste covered with plastic wrap as much as possible as it is being worked with because it dries out quickly. Rolled fondant is used for covering cakes as well as creating décor elements. However, it does not dry to a brittle state as easily and therefore cannot be used for the same applications as pastillage or gum paste. It will develop a dry outer crust, so care should be taken to keep it covered when working.

Making a pastillage link twist

1. Roll out the pastillage $\frac{1}{16}$ in/1.5 mm or thinner on a nonstick surface.
2. Cut teardrop shapes from the pastillage.
3. Carefully cut a slit down the center of each cut piece, leaving $\frac{1}{4}$ in/6 mm uncut at each end. Lift up one piece and flip the flat end in through the slit.



LEFT: Cutting a slit in the middle of the pastillage piece

MIDDLE: Twisting the base of the pastillage piece through the cut

RIGHT: Letting the pastillage dry in the final shape

4. Insert a pin into a piece of foam. Lean the flat end of the pastillage piece against the pin so that it is propped perpendicular to the rest of the piece, which should be lying flat on the foam. Repeat with the remaining cut pieces.
5. Allow to dry until stiff.

Making a gum paste rose

1. Roll a piece of gum paste with a small rolling pin to $\frac{1}{16}$ in/1.5 mm or thinner. Keep the gum paste covered with a piece of plastic wrap when you are not working with it. Have ready a prepared cotton cone with a piece of wire attached to the flat end for the center of the flower.
2. Cut a set of petals out of the gum paste with a five-petal cutter. Cut the petals apart into one group of two petals and one of three petals. Roll the large end of a gum paste ball tool over the edges of the two-petal group to thin them. With a toothpick or a thin knitting needle, roll up one side of each petal. Roll the toothpick firmly across the surface of the petal to draw up and curl the edge of the petal.
3. Turn the petals over and brush the base with Gum Glue (page 860). Without separating the petals, wrap the first petal around the cotton inner cone: The uncurled side of the petal should be wrapped around the cone and the curled side of the petal should be slightly open. Fit the uncurled side of the second petal into the open side of the first petal and wrap the second petal around the first. Press gently to attach the petals to each other and to the cotton cone; the top of the petals should form a tight spiral. (For a rosebud, follow the procedure to this point, but do not add any more petals.)
4. Thin the edges, curl, and brush glue on the three-petal group in the same fashion. Wrap these petals around the first two, overlapping the petals and fitting the third petal inside the uncurled edge of the first. Press gently to attach the petals to one another.
5. For a larger rose, cut another group of five petals. Separate them again into one group of two petals and one of three petals. Thin the edges of the two-petal group as above and curl back both edges of each petal. Turn the petals over and brush the base with gum glue. Wrap the petals around the rose as before, overlapping them slightly.
6. Thin the edges, curl, and brush glue on the three-petal group in the same fashion. Wrap these petals around the rose, overlapping them; the last petal should overlap the first one of the two-petal group. Press gently to attach the petals to one another.
7. Form a hook out of the end of the wire attached to the inner cotton cone and hang the rose upside down to dry.



TOP LEFT: Thinning the edges of the petals with a ball tool

BOTTOM LEFT: Wrapping the first layer of petals

TOP RIGHT: Curling the edges of the petals

BOTTOM RIGHT: Adding another layer of petals

Making a gum paste magnolia

1. Massage together equal parts of gum paste and pastillage.
2. Roll approximately 1 tsp/5 mL of the mixture into a ball, then roll half of the ball into a point. Attach the rounded base of the pointed ball to a piece of floral wire. Attach twisted paper strands to the wire at the base of the ball.
3. Using sharp, pointed scissors, cut V-shaped snips into the sides of the pointed ball.
4. Roll out the remaining gum paste mixture $\frac{1}{6}$ in/1.5 mm thick.
5. Using the templates in Appendix B (page 905), cut three large and three small petals from the paste.
6. Attach the small petals to the wire so that the pointed ball rests in the center (for detailed instructions, see “Making a Marzipan Rose,” page 834). Attach the large petals so that each fills a space between two of the smaller petals.

Molding a gum paste–pastillage mixture

1. Massage together equal parts of gum paste and pastillage. Roll out $\frac{1}{4}$ in/6 mm thick.
2. Place the desired mold over the rolled sugar paste and cut to the shape with a sharp paring knife using the mold as a template.
3. Place the cut shape in the mold and press it down firmly with the top of the mold. Carefully peel the molded shape away from the mold and drape it over a curved object, such as a rolling pin, or a flat work surface. Allow to dry for approximately 1 hour.
4. Shift the shape slightly to ensure that it does not stick to the rolling pin or other surface. Allow to dry completely.



Unmolding a pastillage marzipan leaf for the magnolia cake

Making a fondant swag

1. Roll a strip of fondant 6 by 3 in/15 by 20 cm and $\frac{1}{8}$ in/3 mm thick on a lightly greased surface.
2. Lay the fondant over $3\frac{1}{4}$ -in/8.5-cm dowels, and coax the fondant down and over each dowel. The edges of the fondant should be downward facing.
3. Remove the dowels and draw up the ends to create a swag.
4. Pinch the ends together and trim if necessary.
5. Dampen the ends with water to make them tacky and gently press them on to a fondant-iced cake.



LEFT: Roll the fondant into a rectangle of the desired size. Lay the fondant over 3¼-in/8.5-cm dowels, and coax the fondant down and over each dowel; the edges of the fondant should be face down. Remove the dowels and draw up the ends to create a swag. Pinch the ends together and trim if necessary.

RIGHT: Dampen the ends with water to make them tacky and gently press them on to a fondant-iced cake.

Making a fondant bow

1. Dust the work surface with cornstarch or confectioners' sugar. Roll out a portion of the fondant or gum paste to ¼ in/3 mm thick. Using a ruler, measure a rectangle ¾ by 5 in/ 2 by 13 cm. Cut out the rectangle with a pizza cutter or a knife, ensuring the edges are straight.
2. Dab a small amount of water at each end of the strip. Place a piece of floral wire at the base of one end of the strip. Fold the strip in half, using your fingers to create a large loop. Press down gently to secure the two ends together.
3. Dust the inside of the loop with a cornstarch pouch. Fill the loop with a wad of cotton balls and place on the parchment-lined sheet tray. Repeat this process to make the second loop for the bow.
4. Make six to seven loops for a large bow and five for a smaller bow.
5. Allow the loops to dry for a minimum of 24 hours. Once dry, remove the cotton balls supporting the loop. If some of the cotton strands are stuck to the bow, remove them with a pair of tweezers.
6. To make the ribbons, roll out a piece of fondant or gum paste to ¼ in/3 mm thick. Cut the piece of fondant into one rectangle 3 by 8 in/ 2 by 20 cm. Using a knife or the cutter, cut out a triangle from both ends of the strip, making V shapes. Dip the



Bow technique

end of a piece of wire into some water and insert the wire into the base of the ribbon. Use the egg carton to shape the ribbon and let it dry for 24 hours. Repeat this process to make as many ribbons as you would like.

7. Once the components are dry, use floral tape to secure the loops and the ribbons together. Do not shape any of the pieces by pulling on the fondant because they might break. Adjust the wire and this will automatically move the loop or ribbon.
8. Cut off any excess wire and insert the wire into the cake.

NOTE This method may be used with pastillage as well.

Making dogwood flowers

1. Roll out just enough fondant or gum paste to make small batches of flowers at a time. Dust the surface with cornstarch or confectioners' sugar and roll out a piece of gum paste or fondant to $\frac{1}{8}$ in/3 mm thick. Keep the piece of sugar paste covered with plastic wrap.
2. Use the dogwood cutter to cut out a flower from the sugar paste. Dust the dogwood mold with cornstarch or confectioners' sugar. Place the dogwood in the base of the mold and place the other half on top. Press down lightly and remove the flower.
3. Use the egg carton that has been dusted with cornstarch or confectioners' sugar to shape the flower. Repeat this process with the other flowers and let them dry for 24 hours.
4. Once the flowers are dry, pipe several small dots with the pale yellow royal icing in the center of each flower.
5. To make the flowers appear more realistic, use pale green powdered food coloring to dust around the centers of each flower. Next, accent the edges of the four petals of each flower with pink or red powdered food coloring.

NOTE The dogwood cutters can be exchanged for other types of flowers, such as daisies and hydrangeas, but the techniques remain the same.



Making dogwood flowers

Making a hydrangea flower

1. Roll a small piece of fondant into a seamless ball about $\frac{1}{2}$ in/1 cm in diameter.
2. Taper one end so it becomes cone-shaped.
3. With an auger tool, poke a hole in the center of the wide end. Snip four petals with a scissor. Pinch each petal between your fingers to flatten.
4. Place the flower upside down on the mat and thin petals with a ball tool.
5. Turn the flower right side up and put in one of the holes. Using gentle pressure, draw a knitting needle across each petal from end to center, creating a crease and curling the petal slightly.

6. Make a loop in the end of a #000 g. wire, dip it in gum glue, and insert it through the flower until it is no longer visible.

Making a fondant ribbon rose

1. Roll out a strip of fondant 2 by 6 in/5 by 15 cm and $\frac{1}{8}$ in/3 mm thick on a lightly greased surface.
2. Fold in half, forming a strip 1 by 6 in/3 by 12 cm.
3. Twist one end of the strip down to form the bud.
4. Begin wrapping the fondant strip around the bud.
5. Continue wrapping and gently squeeze the bottom to open and shape the flower.

Embellishing

1. Set up a coloring station on parchment paper to include powdered food color, various brushes, and coloring tools.
2. Pick up a bit of color on a soft dry brush and tap out excess onto the parchment.
3. Gently brush color onto the flowers, being careful to add color a little at a time.



LEFT: Progression of steps and tools for making hydrangea flowers

MIDDLE: Ribbon rose technique

RIGHT: Embellishing a finished hydrangea flower with luster dust

Buttercream for décor

MAKES 10 LB/4.54 KG

High-ratio shortening	2 lb 8 oz	1.13 kg
Confectioners' sugar, 6x, sifted	2 lb 8 oz	1.13 kg
Swiss meringue buttercream (page 417), whipped	5 lb	2.27 kg

Cream the shortening and sugar to full volume. Add the buttercream and bring back to full volume. Store in the refrigerator until needed.

Chocolate dome

MAKES 1 DOME

Bittersweet chocolate, melted, tempered	as needed	as needed
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- 1 Pour the chocolate into a 2¾-in/7-cm polycarbonate dome mold. Allow the chocolate to set for approximately 30 seconds, just until some of the chocolate begins to set.
- 2 Invert the mold over the bowl of chocolate to allow most of the chocolate to spill out, leaving a hollow shell dome.
- 3 Allow the chocolate to set completely, and gently unmold.
- 4 Store in an airtight container. Use as desired.

Chocolate piping gel

MAKES 11 LB/4.99 KG

Dark chocolate, 64%, finely chopped	1 lb	454 g
Gel	10 lb	4.54 kg

Warm the chocolate to 130°F/54°C and add one-third of the gel. Stir gently using a whisk until totally blended. Add the rest of the gel and stir thoroughly. Strain through cheesecloth and keep in airtight containers.

Royal icing

MAKES 1 LB 3 OZ/539 G

Egg whites	2½–3 oz	71–85 g
Cream of tartar	¼ tsp	1.25 mL
Confectioners' sugar	1 lb	454 g

- 1 Place the egg whites in a clean, grease-free mixer bowl. Mix on low speed with the whip attachment just until the whites begin to break up.
- 2 Add the cream of tartar and continue mixing on low speed until the whites become frothy.
- 3 Gradually add the sugar and continue to mix until the icing holds a peak and is dull in appearance.
- 4 Transfer to a glass container and press a moist towel directly on the surface of the icing. Store under refrigeration, covered tightly with plastic wrap.

NOTES If the icing becomes runny, it can be rewhipped each day before use.
Sugar or egg whites can be added to adjust the consistency as necessary.

Dark modeling chocolate

MAKES 1 LB 6 OZ/624 G

Dark chocolate, 64%, chopped	1 lb	454 g
Light corn syrup	6¼ oz	177 g
Cocoa powder	as needed	as needed

- 1 Melt the chocolate to 90°F/32°C. Warm the corn syrup to the same temperature and blend into the chocolate until incorporated. Avoid overmixing.
- 2 Spread onto a parchment-lined sheet pan, cover, and refrigerate for 1 hour.
- 3 Store at room temperature overnight.
- 4 Form into logs and wrap with plastic wrap. Refrigerate until needed.
- 5 To soften, cut into 2-in/5-cm strips. Slice into ⅛-in/3-mm pieces. Knead on a clean work surface until workable, dusting with cocoa powder if necessary.

NOTES Use a clean rolling pin and cocoa powder to roll out dark modeling chocolate.

Modeling chocolate is used for stems like flowers and fruit. It is edible and can be used for dessert containers. However, use it sparingly. Its main use is to create parts of a centerpiece that would be difficult to carve or shape out of couverture such as hands, faces, and the like.

White modeling chocolate

MAKES 5 LB 8 OZ/2.5 KG

White chocolate	4 lb	1.81 kg
Light corn syrup	1 lb 8 oz	680 g
Confectioners' sugar	as needed	as needed

- 1 Melt the chocolate to between 85° and 90°F/29 to 32°C. Bring the corn syrup to approximately the same temperature, 90°F/32°C.
- 2 Add the corn syrup to the chocolate. Blend just until incorporated. Avoid overmixing.
- 3 Spread the chocolate in a parchment-lined sheet pan. Cover with plastic wrap and chill for several hours under refrigeration.
- 4 Store in dry storage overnight.
- 5 Portion into 1-lb/454-g pieces, form into rolls, and wrap each piece individually until needed.
- 6 To soften, cut the piece into 2-in/5-cm strips. Cut into ¼-in/3-mm slices and knead on a clean surface, dusting with sifted confectioners' sugar as needed.

NOTES This mixture is good for flowers, ribbons, bows, and cake coverings. The same recipe can be used for milk chocolate; however, if it is too soft, add a bit of water.

This modeling chocolate can also be colored if desired. Use paste colors, kneading the colors into the chocolate.

White modeling chocolate is a great substitute for rolled fondant and works well for enrobing cakes.



Mixing white modeling chocolate

Marzipan for modeling and cake covering

MAKES 17 LB 2 OZ/7.77 KG

Almond paste	7 lb	3.18 kg
Confectioners' sugar	7 lb	3.18 kg
Fondant	2 lb	907 g
Glucose syrup	1 lb	454 g
Brandy	2 fl oz	60 mL

Blend together the almond paste and confectioners' sugar on low speed with the paddle attachment, about 2 minutes. Add the fondant, glucose syrup, and brandy and mix just until the mixture is smooth. Store in an airtight container under refrigeration.

NOTES You will need approximately 1 lb 4 oz/567 g marzipan to cover a 10-in/25-cm cake.

The consistency of marzipan can be adjusted as necessary. Molded marzipan fruits and similar items require a firmer consistency so they hold their shape. Knead additional confectioners' sugar into the marzipan by hand until the desired consistency is achieved.

Overworked marzipan becomes excessively oily and loses its characteristic smooth, claylike texture. If this happens, knead in a small measure of simple syrup. This will rebind the oils and solids. Additional confectioners' sugar may be added to achieve the original consistency again as well.

Poured sugar

MAKES 32 LB 6 OZ/14.69 KG

Sugar	20 lb	9.07 kg
Water	8 lb	3.63 kg
Glucose syrup	4 lb 6 oz	1.98 kg

1 Place the sugar and water in a large copper or heavy-gauge sauce pot. Bring to a boil, stirring constantly with a wooden spoon or a wire whisk. Using a clean, wet pastry brush, wash the sides of the pot. Remove any crystals that may adhere to the sides of the pot with a small tea sieve or ladle.

2 After the mixture comes to a boil, stop stirring and add the glucose. Continue to wash the sides of the pot until the mixture comes to the proper temperature (see Notes).

3 Shock the pot in a cold water bath. Allow the surface bubbles to dissipate and pour it into a prepared frame or mold.

NOTES To control crystallization, add 1 drop of acid at 266°F/130°C for every 2 lb/907 g of sugar syrup being cooked, along with any color or whitening.

Final cooking temperature will range from 310° to 320°F/154° to 160°C depending on the size of the piece as well as the color desired.

For a pure white-colored sugar, add whitening and cook sugar syrup only to 295°F/146°C.

Various marbled effects can be achieved by swirling a small amount of food coloring into the sugar before pouring it into forms or frames.

The actual volume amount needed will vary depending on the size of the piece being produced.

Rock sugar

MAKES 3 LB/1.36 KG

Sugar	2 lb	907 g
Water	1 lb	454 g
Royal icing (page 851), stiff	2 tbsp (heaping)	37 mL

- 1 Line a mold with aluminum foil. Lightly brush the foil with oil.
- 2 Bring the sugar and water to a boil, washing the sides of the pot with a wet pastry brush so that crystals do not form. Boil to 295°F/146°C.
- 3 Remove from the heat and whisk in the royal icing. The mixture will rise and collapse.
- 4 Return to the heat and bring to a boil again. Pour into the prepared mold. Cool completely, break into pieces, and store in an airtight container.

NOTE Rock sugar can be colored if desired. Add the color at 266°F/130°C. It can also be left white and color can be applied with an airbrush.

Spun sugar

MAKES 1 LB 3 OZ/539 G

Sugar	1 lb	454 g
Water	5 fl oz	150 mL
Light corn syrup	3½ oz	99 g

- 1 Combine the sugar and water in a heavy-bottomed saucepan and stir to ensure all the sugar is moistened. Bring to a boil over high heat, stirring frequently to dissolve the sugar. Wash down the sides of the pan with a wet pastry brush to remove any sugar crystals. When the mixture comes to a boil, stop stirring and skim the surface to remove any scum.
- 2 Add the corn syrup and cook, occasionally washing down the sides of the pan with a wet pastry brush, until the syrup reaches 293°F/145°C.
- 3 Shock the pan in an ice water bath for 10 seconds. Allow the sugar to cool undisturbed at room temperature until it reaches the consistency of honey.
- 4 Lightly oil a foil-covered template and set it on a small container so that it is raised above the surface of the table, over a silicone baking mat.

5 With a fork, gently drizzle the sugar back and forth over the template, allowing the sugar to fall over the sides of the template. Drizzle more sugar back and forth across the first strands, creating a grid of sugar strands.

6 With scissors, cut away the excess sugar that has fallen over the sides of the template. Remove the spun sugar from the template and warm it briefly under a heat lamp until it is pliable enough to bend or curve as desired.

NOTES Isomalt may be substituted for the corn syrup to ensure that the sugar syrup remains clear.

For caramel-colored spun sugar, cook the sugar until it reaches a light golden brown.

VARIATION SPUN SUGAR BALL Follow the directions through step 3. Set up 2 metal bars 8 in/20 cm apart, resting on containers, so they are above the work surface. Use a fork to drizzle the sugar quickly back and forth over the metal bars until a netting of sugar is formed. Gather the sugar into a ball.



Drizzling the sugar over the template



Cutting away the excess sugar

Pulled sugar

MAKES 5 LB 4 OZ/2.38 KG

Sugar	2 lb	907 g
Water	6½ fl oz	195 mL
Light corn syrup	32 fl oz	906 mL
Glucose syrup	7 oz	198 g
Tartaric acid (opposite)	4 drops*	4 drops*
Color	as needed	as needed

*The number of drops of acid can be adjusted for humidity or environmental conditions as well as for the skill level of the person pulling the sugar.

- 1** In a copper or heavy-gauge sauce pot, bring the sugar and water to a boil, stirring constantly. Wash the sides of the pot with a wet pastry brush to remove any crystals that may adhere.
- 2** When the mixture comes to a boil, stop stirring and add the corn syrup and glucose. Bring back to a boil. Cover and store at room temperature.
- 3** For final cooking for pulling, bring back to boil. Continue to wash the sides of the pot throughout the boiling of the sugar. Add acid as necessary, and color if using, at 266°F/137°C. Cook to a final temperature of 315°F/156°C. Pour onto a lightly oiled marble slab.

NOTE Final cooking temperature as well as the amount of acid used can be adjusted according to one's skill level as well as weather conditions such as high humidity and warm weather.

Tartaric acid

MAKES 8 FL OZ/227 G

Water	4 fl oz	120 mL
Tartaric acid, granulated	4 oz	113 g

Bring the water to a boil. Add the acid and stir to dissolve. To store, put into a medicine bottle with a dropper.

Pastillage

MAKES 1 LB 4 OZ/567 G

Confectioners' sugar, sifted	1 lb	454 g
Cream of tartar	¼ tsp	0.60 mL
Gum tragacanth	4 tsp	20 mL
Water, hot	2 fl oz	60 mL
Shortening	as needed	as needed

- 1** Put 8 oz/227 g of the sugar, the cream of tartar, and the gum tragacanth in the mixer. Add 1 oz/30 mL of the water and mix on medium speed with the paddle attachment to a paste.
- 2** Add more of the sugar and water alternately until the mixture forms a kneadable dough. (You may not need all the sugar or all the water.)
- 3** Remove from the mixer bowl and knead on the work surface until smooth. Form into a log, coat the log with a little shortening, and wrap with plastic wrap. Wrap again with a wet towel and then once more with plastic wrap or put into a plastic bag.

Gum paste

MAKES 1 LB 8 OZ/680 G

Gelatin, granulated	½ oz	14 g
Water	4 fl oz	120 mL
Glucose syrup	3⅓ oz	94 g
Shortening	¾ oz	21 g
Confectioners' sugar, sifted	2 lb	907 g
Gum tragacanth	1¼ oz	50 g

- 1** Bloom the gelatin in the water for 5 to 10 minutes. Melt over a hot water bath.
- 2** Add the glucose and shortening. Warm until all the shortening melts. (The mixture should be hot.)
- 3** In a 5-quart bowl, sift together the sugar and the gum tragacanth. Add the gelatin mixture all at once and mix until it comes together.
- 4** Blend in a mixer on medium speed with the paddle attachment for 5 minutes. (The right consistency should be soft but not wet.)
- 5** Remove from the mixer and quickly knead together on a work surface rubbed with a small amount of shortening. Wrap tightly in 2 layers of plastic wrap.

Rolled fondant

MAKES APPROXIMATELY 2 LB/907 KG

Water	1½ oz	43 g
Gelatin, granulated	2¼ tsp	11.25 mL
Light corn syrup	4⅓ oz	123 g
Glycerin (optional)	1½ tbsp	22.50 mL
Confectioners' sugar, sifted	1 lb 8 oz	680 g

- 1 Combine the water and gelatin and heat gently to dissolve only, about 90°F/32°C. Remove from the heat and stir in the corn syrup and glycerin, if using.
- 2 Add the sugar and mix until smooth and well combined. Form into a log.
- 3 Lightly coat with shortening. Wrap with plastic wrap, sealing tightly.

NOTE It is not necessary to refrigerate the fondant. Best results are achieved if the fondant is used the same day it is made, as it will tighten up overnight.



Covering a cake with rolled fondant

Gunge

Water	as needed	as needed
Old gum paste (page 858)	as needed	as needed

Take 2 parts water and 1 part old gum paste, put in a pot, and boil until it is the consistency of glue.

Gum glue

MAKES 8 FL OZ/240 ML

Gum arabic	1 tbsp (heaping)	6 g
Water	8 fl oz	240 mL

Combine the gum arabic and water in a small bowl. Cover with a damp cloth and let stand until the gum arabic has completely dissolved. Store covered under refrigeration.

NOTES Brush onto finished gum paste items to give them a shiny surface.

This is used as an adhesive for sugar paste work.