



Vinyl Clarity

The secret is out. When smooth, glass-like transparency is needed for your sugar work, vinyl is the way to go.

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Executive pastry chef Anthony Chavez from Sofitel Chicago Water Tower and Michael Joy from the Chicago School of Mold Making worked together to create unique effects for his run at the 2007 Paris Gourmet's U.S. Pastry Competition.

Each year, chefs from around the nation gather in New York City to compete for the title of Paris Gourmet's Pastry Chef of the Year. As with any competition, unique challenges must be overcome. The first and foremost obstacle is logistics. Since the event does not provide kitchens for the chefs to work in, participants must bring everything they need with them, including their partially assembled showpiece components. They have three hours to build a showpiece (constructed of both chocolate and sugar) and must present three cakes.

Competitors in the event face the difficulty of transporting delicate showpiece elements, which is tough enough controlling temperatures and packing to avoid breakage on a cross-town venture but especially daunting on a multi-day drive across the country.

Upon arrival, chefs have only the equipment they brought with them. Despite these constraints, competitors are able to create sculptural compositions of impressive size and color combinations that demonstrate capable hand skills, clean casting techniques and -very importantly- innovative effects that capture the judges' attention.

To build his showpiece, Chef Anthony perfected several techniques, including special applications for working with vinyl. Although vinyl is commonly found in kitchens, using it can be challenging due to its tendency to warp and its difficulty to cut. In the following demonstration, pastry chef Anthony Chavez shows successful techniques for employing vinyl to its full potential as an effective and quick tool for creating eye-catching showpieces.





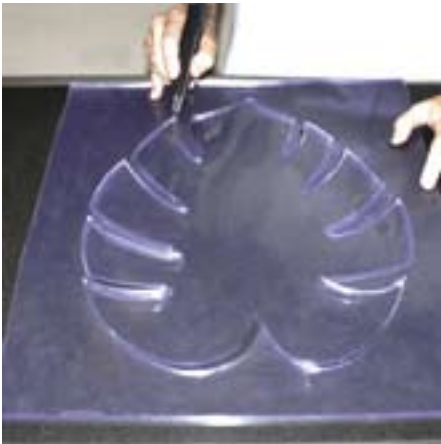
1. Pastry Chef Anthony Chavez prepares to make a custom vinyl casting template. He begins with a 24" long sheet of 1/8" thick vinyl sheet.



2. The leaf template (black) was made by tracing a real leaf onto paper and cutting it out. Next, Anthony uses a marker to trace the pattern onto the vinyl sheet. Be sure to leave a 1" perimeter from the edge of the pattern to the edge of the vinyl.



3. To soften the vinyl before cutting, Chef Anthony puts it in a preheated (empty) oven at 300° F. With the door cracked open, he heats the vinyl for 3 minutes (maximum). *Note:* Be sure to place parchment paper beneath the vinyl to keep it clean. Do not leave oven unattended.



4. Place the warm vinyl on marble so it will not slide during cutting. While warm, the razor knife will slice through in a single pass. The result will be a cut with clean, smooth edges. Re-heat the vinyl if cutting becomes difficult.



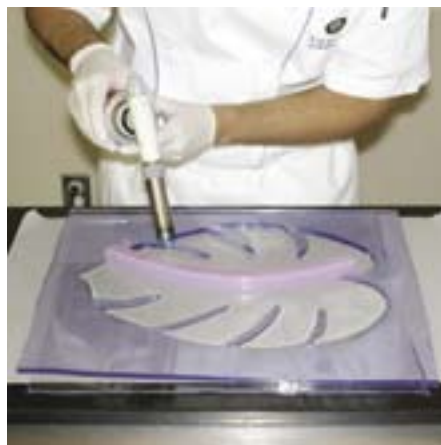
5. The pattern is cut out in less than 10 minutes. If the vinyl was cut while cold, it would have taken at least an hour. More importantly, cold cutting requires strong knife pressure, which is quite dangerous.



6. To prepare for sugar casting, Chef Anthony stacks layers on the marble:
 1st Parchment on marble surface
 2nd Flat (uncut) 16" x 24" sheet of vinyl
 3rd Vinyl leaf template
 4th Half silicone Noodle™ divider.



7. Chef Anthony prepares a small amount of clear isomalt to pour into the vinyl leaf template. Remember, there is a sheet of vinyl directly beneath the leaf template. (The white parchment prevents the vinyl from touching the marble.)



8. A torch is used to remove surface air bubbles. When using a torch near vinyl, keep the flame moving. Vinyl can catch on fire and give off toxic fumes.



9. After the isomalt has cooled for about 10 minutes, the Noodle™ divider is removed. The torch is used again to heat the side wall where the Noodle™ was in contact with the sugar. This will help keep the isomalt flexible enough to bend.



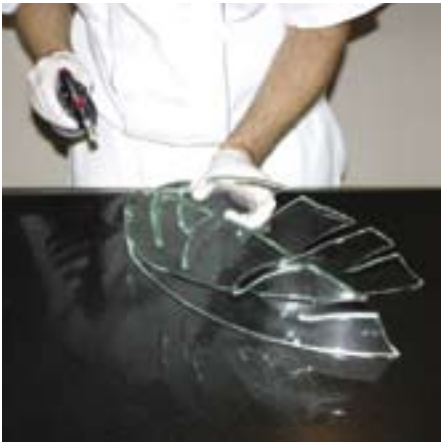
10. Chef Anthony lifts both sheets of vinyl off the marble and drapes them over a pre-made slump mold. (The slump mold is made of 1/4" thick foam core board.)



11. After allowing the isomalt to cool for another 10 minutes, the vinyl leaf template is removed.



12. Once the sugar casting is cool enough to hold its shape, the vinyl can be removed from beneath the leaf. With contoured flat shapes, it is best to hold the casting in one hand and gently pull the vinyl down from below.



13. Anthony repeats the casting process in order to create a second leaf. Both leaves are torched together to make them self-supporting. Chef Anthony sets the leaves aside while he prepares to cast an upright base section for the showpiece.



14. To do this, he layers parchment on marble, then vinyl, then silicone (blue) and lastly, he places a silicone inclusion within the blue silicone collar mold. *Note:* Wooden rails are used to assure perpendicular shaping of the silicone.



15. Chef Anthony pours clear isomalt directly onto the silicone inclusion. The liquid pressure from the pour pushes air bubbles off the surface of the silicone inclusion. The collar mold is filled to the top, completely covering the purple silicone.



16. Once the isomalt has cooled, the silicone collar mold can be removed.



17. Next, Chef Anthony stands the casting upright and gently peels the vinyl sheet off of the isomalt casting. Notice how the purple inclusion is still fixed into the casting.



18. With care, the purple inclusion can be peeled from the casting.



19. The jaguar looks as if it is embedded inside of the sugar. Notice the difference in clarity between the smooth surface poured on the vinyl sheet and the 'sand-blasted' look where sugar was poured over the textured silicone inclusion.



20. Next, Chef Anthony prepares to assemble the sugar base structure. In order to secure the showpiece to the work surface, he places a daub of hot isomalt on the table top. The foot of the cast section is then set onto the hot isomalt.



21. Using the collar mold again, Chef Anthony casts a second base section (without the jaguar). Both sections are joined while Anthony checks the vertical level. If the base sections are not vertical, the upper portion of the showpiece is likely to be unstable.



22. Using a simple geometric mold, Chef Anthony unmolds an oval platter.



23. Once he is certain the two sections are equal height, Chef Anthony glues the oval platter in place. *Not Shown:* A second oval platter cast in chocolate is attached atop the sugar oval. The resulting surface allows the chef to join chocolate elements to a sugar structure.



24. Chef Anthony finishes the last details of the showpiece. Notice how he used the vinyl leaf template to cast two full-sized chocolate leaves. Artistically, this helps unify both top and bottom of the showpiece.



25. Chef Anthony has placed the cast leaves in between the base structure. Next, he places a sugar disk on top of the leaves.



26. As the final step, Chef Anthony places his cake onto the sugar leaves. The transparent sugar creates the illusion of the cake floating on air.



27. To fully appreciate the three-dimensional effect of the clear sugar and jaguar inclusion, a dark background provides the necessary contrast. To learn more about casting with vinyl, visit *Tips & Tools* at www.ChicagoMoldSchool.com.