

DESIGNING AND MAKING CUSTOM FURNITURE

IN THE FIRST OF A SERIES OF ARTICLES, **DENNIS ZONGKER**
BEGINS WORK ON A HALLWAY TABLE

This is the beginning of a series of articles covering the design, glue-up, joinery, carving, bending, inlays and marquetry of a custom hallway table. Later, I will also describe how I made the accompanying side chairs.





DESIGN CONSIDERATIONS

How do I start a new design? Actually, it can be a pretty simple process. It all starts with an idea, usually the customer's. Most customers have some idea of what they want. If not, your experience can help them to design the perfect piece for them.

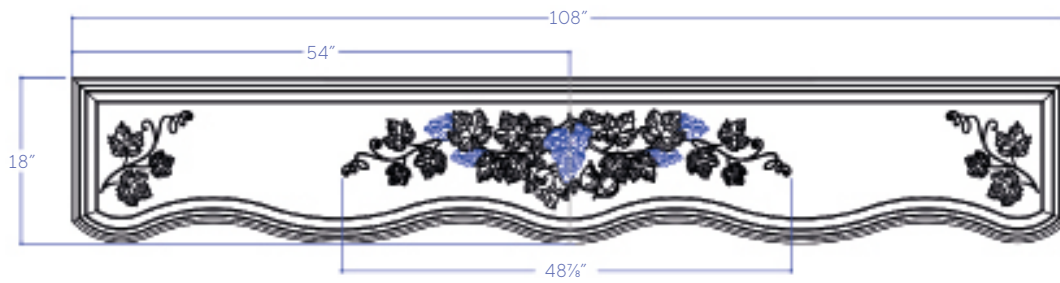
Basically, you are going to make a piece of furniture that will be exactly what they want. It might not have anything to do with your own personal design style unless they request that you incorporate your style into the piece. This customer is very familiar with my work and wanted both carving and marquetry added to the design.

For this hallway table and two side chairs I felt a little blessed because I have worked with this customer in the past, and he is from my hometown of Omaha, Nebraska. The piece he wanted designed and made would go into a penthouse in New York City on the 78th floor. So yes, I was a little excited to have been flown out in a private jet to see the décor of the rooms and the size of the space where the furniture would be placed.

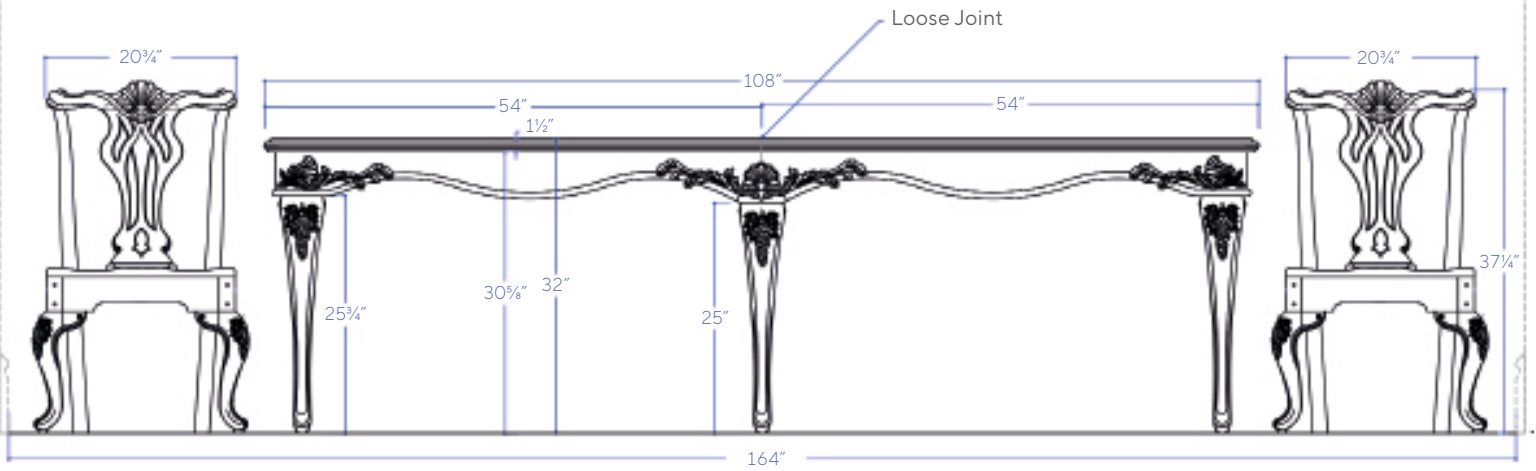
This would be situated in the main hallway with tall ceilings with traditional mouldings. The large room in front of the hallway has all different styles of antique furniture. All this information helps when designing a piece to fit in the décor of what already is existing in the room.

There were many restrictions to incorporate into the design, such as the table could only be 18in (460mm) deep, in order for people to be able to still have room to walk down the hallway. The customer wanted a centre table with a side chair on both sides of the table. The size of the hallway opening is 164in (4,165mm) so the table would have to be about 108in (2,743mm) long. I knew that to get this piece up in the lift it would have to break down into two pieces, having a loose joint in the middle.

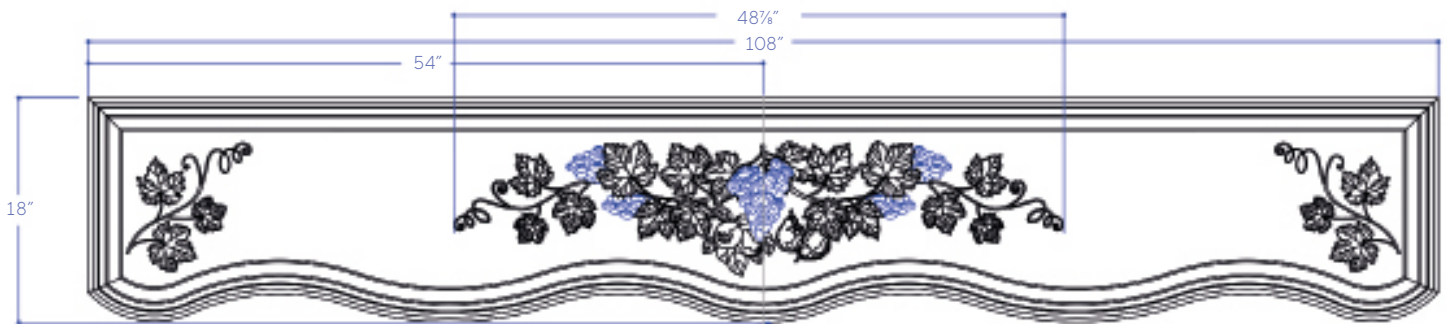
The design of the hall table was up to me. My vision was to have a fruit theme with grapes and leaves as the main design element. This would fit nicely with a strong traditional style adding radiuses and curves to the tops, aprons and front legs.



Plan View of Marquetry Top - No Scale

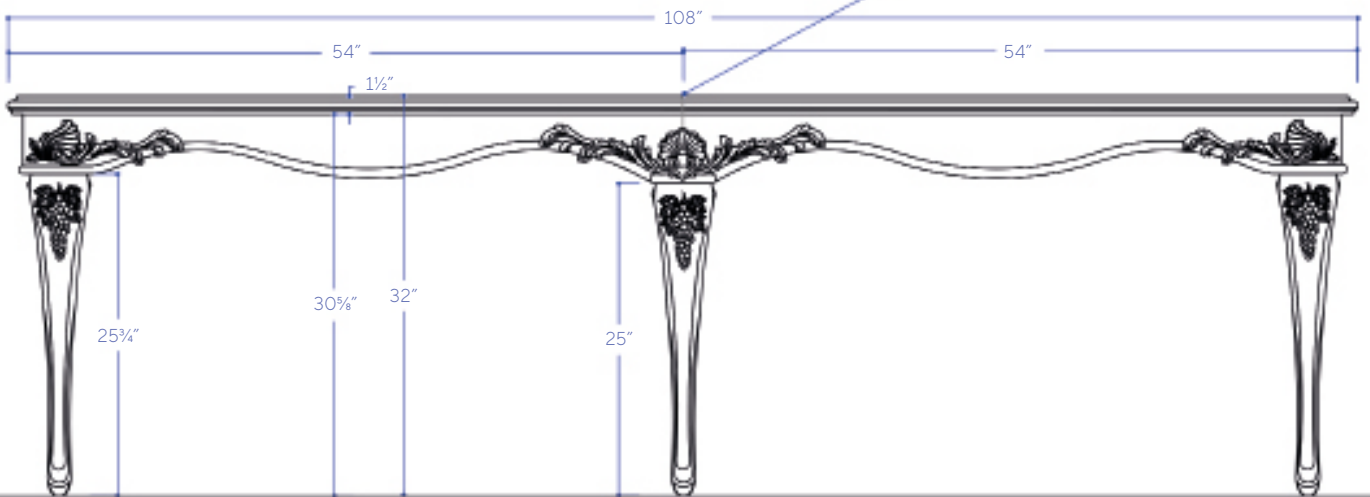


Front Elevation of One Hallway Table and Two Matching Chairs - No Scale

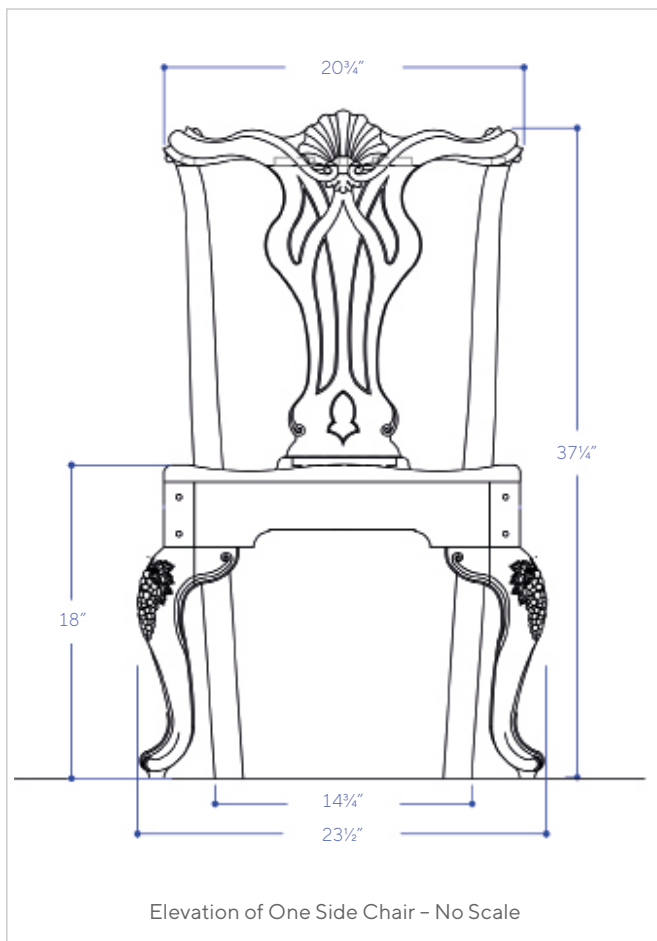


Plan View of Marquetry Top - No Scale

Loose Joint



Front Elevation of One Hallway Table - No Scale



Elevation of One Side Chair - No Scale

The design needed to be a fruit melody with more of the grape theme, then adding a few apples, leaves and pears to bring a little colour to the design.

COMPUTER AIDED DESIGN

Using this project as an example, I'll explain my design process in AutoCAD. I began by drawing a rectangle of the exact size of the hallway table centred between the walls. Then I drew a side view and top view of the table. Once all my sizes were correct, I started to add the shapes and details; this can take a few attempts to get right before I see my vision realised on screen. Once I figured out my design, I drew in the carving details for the legs and aprons; I will do this until they fit proportionately. For the apron, I designed a main shell in the centre with flowing acanthus leaves and side shells on both ends.

Then I moved onto designing the top marquetry. The design needed to be a fruit melody with more of the grape theme, then adding a few apples, leaves and pears to bring a little colour to the design.

My next step was to design the two side chairs. For this style of table, the Thomas Chippendale type of chairs would be a perfect match. The chairs will have the same decorative elements as the table, with a centre shell with scrolls running from the shell to the corners of the upper back legs. The cabriole chair legs will use the same grapes and leaf design, just scaled down to fit the corner of the legs. Adding similar carving details to the hallway table and two side chairs will make the three pieces a matching set.

CLAY MODELLING

Once my drawings were approved by the customer, I went straight to clay to make models of the carved elements. I made a corner mock-up of the table so I could see how the shape of the legs and aprons, top and carvings will blend together and make any changes before I move to working in wood.

By using oil clay, I don't have to worry about the clay ever drying up. This gives me the time needed to find the shape I am looking for. Sometimes the design stage can take a few days, depending on my vision and transforming the correct shape around armatures. The finished clay model of the table legs and apron can help me figure out the glue-ups and my carving layout.

1 I made the armature smaller than the finished size of the leg, in order to mould the clay design with room for adjusting the shape of the leg. I drilled holes in the armature, then screwed in the screws at different lengths for holding the oil clay in place without falling or sagging.

2 I applied the mass of the clay around the entire leg, then used a heat gun to soften up the oil clay to make it easier to move around and adjust the design. Then I smoothed the clay by simply using my hands.



PHOTOGRAPHS BY DENNIS ZONGKER



3 I applied extra clay to where the carvings will be placed then I outlined the design with a drawing template of the carving. With clay tools it is easy to press and move the clay around to mould the design of the grapes and leaves. This is the best time to change the design if needed. I ended up adding extra grapes to my design, which is a nice thing to figure out before carving into wood.

4 Once I had the leg design all worked out, I started on the apron. The bottom edge of the apron will have a half-circle hand-carved trim that will following the double radius profile of the apron. I printed to scale the half-shell scrolled acanthus leaf and pinned it to the apron. This showed me where to place the screwheads for the clay to hold to the smooth area of the apron.



5 I repeated the same steps used on the end carvings for the centre shell and acanthus leaves. By making this mock-up of the table and adding the clay I am positive the design will work out on the American black walnut for the final piece. This gives me the exact sizes and answers all my questions on how this hallway table design will work out.

THE NEXT STAGES

I hope you will follow along as the next several articles will show the processes I have taken to achieve the finished result of a custom hallway table and two side chairs.

You can also follow my work on Instagram: [@denniszongker](https://www.instagram.com/denniszongker)

