

Copying Museum Pieces

Bring the right tools, enter with respect, and go home with accurate plans

BY GEORGE WALKER

It's not uncommon for a small town to have a local museum or historic home that's open to the public. Visitors to these places often find wonderful furniture pieces on display, sometimes dating back to the Colonial and Early American periods, with remarkable regional pieces as well. And, I've discovered, some museums will let you do more than look. Not too long ago, I received permission to take measurements from a tall case clock in the collection at the historic Spring Hill home in Massillon, Ohio (www.massillonproud.com/springhill).

Before heading pell-mell to the nearest museum, it's a good idea to do some groundwork. A little preliminary effort pays dividends when it's time to take measurements.

First, get permission from the museum

The first item of business is to contact the museum and request permission to measure

Get it down on paper. If you've properly planned a museum visit, it won't take long to measure the furniture piece and record all the important dimensions.

Photos: Tom Begnal

Assemble a basic measuring kit

A measuring kit is handy for documenting a piece. The kit I use helps me take accurate measurements without risking damage to the piece. It includes a cloth measuring tape, a pair of wooden folding rules, a flashlight, a magnifying glass, cotton gloves, an inspection mirror on an extension handle, graph paper, and a pencil. If the piece has detailed turnings or carvings, consider using turning calipers and dial calipers. To prevent scratching the patina, put a strip of masking tape over the jaws or make a simple pair of wooden calipers with the tips rounded off.



the piece that has caught your eye. I find it best to approach the process like a job interview. If you don't know anyone at the museum, try to tour the building when visitor traffic is low. You're more likely to find someone with time to talk.

You might want to bring photos of your work to show to the museum staff. It lets them know that you are a serious woodworker. In the course of your discussion, make sure your enthusiasm for the museum collection comes across. Be patient. Listen to their concerns, and be willing to work within the museum's framework of rules and regulations. For example, they might want an agreement that says you won't make the piece commercially.

The answer to your request for permission can run the gamut from a simple "yes," to "take 20 minutes right now," to "we need to wait for approval from the board of directors," to a polite "no." Don't be offended if you are denied permission. Many of these antiques are valuable, and some museums simply don't want to risk damage to an important piece in their collection.

If you get an OK, be ready to go to work, especially if you get the "... right now" response. Basic research and preparation can help you make the most of your opportunity.

Preparation is the key to getting detailed plans

In the best-case scenario, you have found an interesting piece and you can arrange to come back to the museum later to take



First, do no harm. Permission to measure a museum piece carries with it an obligation to use exceptional care. Light cotton gloves help prevent fingerprints. A cloth measuring tape won't scratch or dent the wood like a steel one would (top). With the help of a mirror and flashlight, you can look at the underside of a table without turning it upside down (center). Applying masking tape to caliper jaws makes them friendlier to wood (bottom).

Don't forget a camera

If the museum allows the use of cameras, bring one along. Photos are always handy when you get home and start drawing the plans.

Keep in mind, though, that some museums frown on cameras, mainly because regular exposure to camera flashes eventually can change the patina of the wood. Other museums might let you take photos, but only without a flash.

You can get good photos even if a flash isn't permitted, but you'll be limited to using the ambient (natural or electric) light that falls on the piece. You'll need a camera that allows manual setting of the shutter speed and aperture. A tripod is a must. And you might want to bring along a 2-ft. square of white posterboard to use as a reflector. With the camera held in the tripod, you can set an especially slow shutter speed without worrying about a blurry image. This will give you a good exposure even in low light. Your camera manual provides the specifics.

Start by taking a front-view shot of the entire piece. Then move in closer, taking detailed shots of moldings, beads, carvings, and the like. Photograph the side of the piece in the same way.

Remove any drawers and shoot them from the front, side, top, and bottom. Also, get shots of the drawer joints. Then point the camera into the case and photograph the framework.

If you're not using a flash, the reflector is great for getting an extra measure of light into a dark place, such as the interior of a cabinet. Angle the reflector (an assistant would be helpful here) to bounce the ambient light into the darkness.

to hop around the piece taking measurements; it is too easy to neglect something.

Next, draw the profiles of any moldings or curved parts. Use the pair of wooden rules to determine transition points and then connect the dots freehand. Carved or sculptural elements are the most challenging and may require several views. Make sure you record major and minor diameters of curves and the points where transitions occur.

Finally, review the sketches and make notes on joinery and hardware placement as needed. On visible boards, be aware of any special edge treatment. Also, record the grain direction, fastener placement, and the location of any glue blocks or pegs.

When you leave the museum, you will have a comprehensive set of notes and sketches. Be sure to go over them as soon as you return home, while your memory is still fresh. Then you can begin converting all that raw data into a set of clear and detailed drawings. □

George Walker reproduces period furniture at his home in Canton, Ohio.



Bring your camera. If the museum allows it, be sure to take photos. Shoot the piece from several levels and a variety of angles. Get in close to show details such as beads and moldings.

