

by David Lantrip, MCPF, GCF

## Framing Stained Glass

skilled framer needs to be prepared to handle just about any form of artwork a customer presents. Artwork that is seen less often can test a framer's nerves since the particular needs and framing methods of that type of art might not come readily to mind. This is precisely why framers need to be prepared beforehand. After all, the design counter is not the place to learn about framing new type of artwork if the customer is to have confidence that the job will be done right.

One such type of art is stained glass. Despite the fact that stained glass as an art has existed for 1,000 years, it's not every day that someone brings a piece

Displaying stained glass may seem intimidating, but it can be framed and handled routinely by following a few basic design principles

in to be framed. Traditional stained glass work, such as that found in churches and important buildings, is worked in the lead came method. Relatively large pieces of glass, cut to shape,

are held within H-shaped channels of lead known as "came." The ends of the came are soldered to adjacent pieces, and the glass is held tight with mastic that is worked into the small spaces between the channel and the glass. In modern work, especially those using large, heavy pieces of glass, the came may be zinc. For a short period in the early twentieth century, copper or brass was occasionally used in windows, but its use is quite rare today.

In the late nineteenth century, the copper foil, or Tiffany, method was developed in response to the need for intricate, organic shapes and the small pieces of glass needed in the Art Nouveau style. In this method, an artisan applies a narrow, self-adhesive



Stained glass worked in the Tiffany method midway through the soldering process. Once the soldering is complete, a small metal frame is applied, the solder has a patina applied, and the entire piece is cleaned and polished.

foil strip, usually about 1/4" wide, to the edge of the individual pieces of glass, burnishing and folding it to either side of the glass. With the pieces assembled like a jigsaw puzzle, a bead of tin/lead solder is applied along the copper foil lines, with the solder flowing into the gaps. When a bead of solder is applied to the second side, it forms a structure similar to the H-shaped came.

With both methods, the lead is usually artificially aged with patina solutions, and a U-shaped frame of sturdy metal is applied to the perimeter. Lead lines at the outside edges are continued slightly onto the frame to tie the stained glass to the frame, adding structural integrity.







This small panel's design is reminiscent of an early twentieth-century bungalow, so a dark, hardwood frame with simple lines was a natural choice. Three frames stacked together give it the presence it deserves, and an LED panel (lower left) allows it to be enjoyed as it should be, even without a window.

Take a little extra time at the design counter to avoid troublesome and expensive problems:

- As a hand-crafted product, stained glass may not always be square. Be sure to measure the diagonals to check for square. Discrepancies can be accommodated by routing out the moulding to make a wider rabbet or cutting the frame slightly oversized and adding a fillet to the lip.
- Hold the stained glass up to the light (but not overhead) to check for broken glass, which will be much more obvious when framed and hanging in a window. Point out any problems, document them, and refer your customer to a local stained glass artisan for repairs.
- The metal frame used for stained glass is joined at its corners with solder. If this is not applied neatly, there will be lumps that will not allow the stained glass to sit flat in a frame. Self-adhesive felt or Volara foam tape will allow it to sink in slightly and sit correctly in the frame.

In contemporary stained glass, the method used depends in large part on the design. The copper foil method is well-suited to designs with small pieces of glass and organic shapes. Lead came is usually preferable in works with larger pieces of glass and straight or geometric designs. The two methods may also be

combined, with areas of fine detail using the copper foil method incorporated into a larger design worked in lead came.

Designing framing for stained glass is similar to designing for works on canvas, with the added challenge that customers will most often want to display a piece in a window so that the art will be illuminated by sunlight streaming through from the other side. That is, after all, the distinctive characteristic of these "jewels of light."

Take design cues from the style of the art:

- For religious or very traditional designs, consider frames with dark metal or stone-like or distressed dark wood finishes with simple profiles. These emulate the materials that would surround a stained glass window in a cathedral or old manor house.
- Art Nouveau designs are well-served by frames with curving, vine-like patterns and sinuous designs. Dark bronze finishes reflect the patina found in metalwork common to the period, like those found in Tiffany lamps.
- Arts and Crafts, Mission, and Prairie School motifs (think Frank Lloyd Wright) look good in clean, unadorned profiles in dark finishes such as oak and walnut. For a very authentic appearance, look at frames in quarter-sawn oak joined with visible joinery such as pegged tenons.
- Stained glass in the style of windows from Bungalowstyle houses of the 1930s look great in "shabby chic" distressed and whitewashed mouldings or reclaimed wood.
- Abstract and geometric designs, just like other media, often look great in simple, unadorned profiles with clean finishes. Rules are made to be broken, of course, and an abstract design sometimes benefits from the contrast of a more traditional frame.

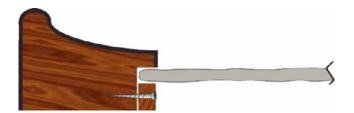
It's always a good idea to not place a frame with a lot of detail and ornamentation too close to the artwork



Specialized hanging hardware attaches to the side of the frame. allowing it to hang in a window by a chain. If hanging hardware were attached to the top of the frame, it would impose too much stress on the moulding.

since the patterns can fight for attention. Well-proportioned mats provide adequate visual space that might avoid this problem, but mats are not suitable in framing stained glass. The best solution is to use stacked moulding, with a wide, simple frame inside a more ornate one. This takes the visual place of matting. A practical benefit is that the inner frame can be more substantial to carry the weight of the stained glass while the narrower outer frame provides decoration.

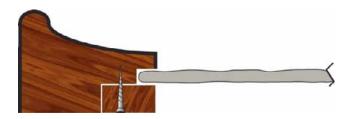
In addition to aesthetic considerations, there are



Wooden spacers can be used with any standard moulding of sufficient depth. Painting the spacers and the rabbet black will reduce their visibility, especially important if the stained glass panel contains large amounts of clear glass.



Specialized mouldings for stained glass have a dado rather than a rabbet. Their appearance is the same on both sides, important if it is to hang in a prominent window where the outer side is easily seen.



A standard moulding can be modified with a second rabbet to accommodate a strainer frame to hold the stained glass in place. This method allows for much more variety in design.

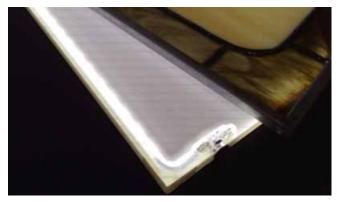


Detail of stained glass worked in the older lead came method. The larger size of the came and its strength makes large panels possible.

some practical matters to keep in mind when selecting frames. The glass used in creating stained glass is much thicker than glass for framing, up to 1/4" thick. When the additional weight of the lead is factored in, it adds up to a rather weighty piece, so this is not the time to use skimpy frames. Steer your customer to more substantial frames of sturdy wood, and use more secure joining methods if necessary. Reinforced corners, cross nailing, spline joints, or hardwood dovetail inserts may be needed to ensure that the frame is sturdy enough to carry the weight.

The profile of the moulding must also be considered. If the framed stained glass is to be displayed in a window, your customer will probably want to hang it by short lengths of chain. In this case, use specialized hanging hardware that attach to the sides of the frame. Since the weight will be carried by the outer edge of the frame, it is important to avoid reverse scoop or similar profiles that are narrow at the outer edge. Resist the temptation to use screw eyes attached to the top of the frame; this puts too much stress on the top rail of the frame and the corners.

Fitting stained glass into a frame is complicated by the fact that the back is open and light will come through the art. The fitting method needs to be unobtrusive. Canvas offset clips might seem an obvious solution, but they may show from the front of the frame if the metal frame on the stained glass is narrow. A more elegant solution is to use narrow strips of wood fit into the rabbet as a stop to hold the artwork in place, similar to the way the sides of a shadowbox are lined to hold the glass. Painting the rabbet, wooden strips, and the back of the frame black adds a somewhat finished



Advances in LED technology make it possible to illuminate artwork in a frame without the need for cumbersome and expensive framing provisions. This panel is thin enough to fit easily in most average frames.

appearance, although more elaborate finishing can be done according to a customer's wishes and budget.

As an alternative, mouldings made specifically for framing stained glass are milled with a dado rather than a rabbet. Similar to a metal frame, three sides are assembled into a U shape, the stained glass is inserted, and the fourth side is joined. These are usually available unfinished in simple profiles from suppliers specializing in hardwood frames, although they may also be ordered finished.

Standard mouldings can be modified to hold stained glass in a manner similar to those made with a dado. A second rabbet is milled to accept a strainer frame, which is screwed into place to hold the artwork. This method allows a wider variety of decorative mouldings to be used, providing more design versatility, finished appearance, and easy reversibility. If a finished hardwood is used, the frame can be just as attractive from the back as from the front.

Sometimes customers request lighting inside a frame to illuminate stained glass if it is displayed in an area without a window. The usual solutions have included adding lights of some sort in a frame deep enough to accommodate the lighting and a diffusing panel. Add the need for wiring and avoiding heat buildup, and the result can be a lot of work, often with little profit, and a less than completely satisfactory product.

Recent advances in LED technology and corresponding lower prices offer an excellent solution. The custom-sized light panel used in the example shown in this article is from Light Beam Industries (www.lightbeaminc.com). It contains LED lights integrated into a diffuser and comes with a low-voltage power supply with an optional dimmer control. Only 5/16" thick, it makes

The only modification needed for the LED panel was a small notch cut into the frame for the power cord, and this was



it much easier to use a moulding of average depth and opens up many design possibilities. Since the heat output is virtually nonexistent, there is no need for complicated and possibly unsightly ventilation provisions. It simply fits behind the stained glass just like a backing and without the need for unusual construction. The only special consideration is that the power cord needs to be accommodated with a small groove in the back of the frame or a small slit in the dust cover.

There is not much in framing that is incredibly difficult, but there are many small details to remember. Although stained glass may seem intimidating, it can be framed and handled routinely once you learn more about it. ■

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