

F R L A O M A E T S

by Paul MacFarland, CPF

Origins and Applications

As 20th century Modern Art movements began to define themselves,

so did the frames that housed those works. The Impressionists broke away from the tight restraints of period framing, and several late-19th century American painters designed frames that responded to the individual nature of their work. Simple architectural profiles began to replace the traditional ornamented ones that dominated the 19th century, as painters searched for frames that would meet the basic physical needs of their artwork without alluding to the past or competing with the contemporary.

These minimal frame designs were exemplified by the lathe, or strip, frame popular in Europe and the U.S. after World War I. Made with common plastering lathe, the frame was constructed post-and-lintel style and nailed directly to the stretcher, protruding approximately $\frac{1}{8}$ " or so above the painting surface. The strip design was generally painted a neutral hue, but occasionally a framer would gild and burnish the approximately $\frac{1}{4}$ "-wide face.

The platform, or Mondrian, frame also helped to set the format for 20th century abstract painting frames. It was developed in the 1920s by the painter Piet Mondrian, and was possibly influenced by architects Le Corbusier and J.J.P. Oud. The design consisted of a raised post and lintel strip (or strips) to form a frame; it is then attached to the surface of a 4"-wide (or larger) mitered flat moulding to produce a panel that sat below the plane of the picture. While the strip frame does little to isolate the painting from its surroundings, the Mondrian's wide

neutral border allows the work to stand away from the wall and any competing patterns, textures, or colors. Both the strip and Mondrian frame styles were widely produced

by artists, students, and framemakers in the years between the World Wars.

In 1953, the floating, or float, frame was designed by New York master framemaker Robert Kulicke for Knoll Associates and quickly became the definitive frame of the Abstract Expressionists and other painters from "The New York School." The original float frame was a natural evolution of the Mondrian and strip frames, and many different profiles and finishes have been used in conjunction with the design since. Today, it is widely accepted as a 20th century American period frame.

Taking its primary elements from both the strip and the Mondrian design, the float frame presents the painting in its entirety while allowing

a minimal but sufficient isolation from the competing wall space by supporting the work (thereby fulfilling the primary role of the frame) and presenting the painting in an understated, yet formal manner. The viewer sees the entire painting as the artist did on the easel, unrestricted by overlapping edges or aggressive ornamentation.

Although the original design stood alone, contemporary use includes the float frame in the role of a liner to provide a breathing space (or, in this case, a void) between the painting and an architectonic or ornate period frame.

There are a few limitations on the use of a float frame. Aesthetics and period dictate its design application; however, there are times when the condition of the painting must be considered as well. For example, an older work that spent years sandwiched in a rabbeted



This painting by T.C. Lillick captures the image of Ted Egri, a Taos artist. It is housed in a float frame with a depth of $2\frac{1}{4}$ " and width of $3\frac{1}{4}$ " (Frame by Paul MacFarland)

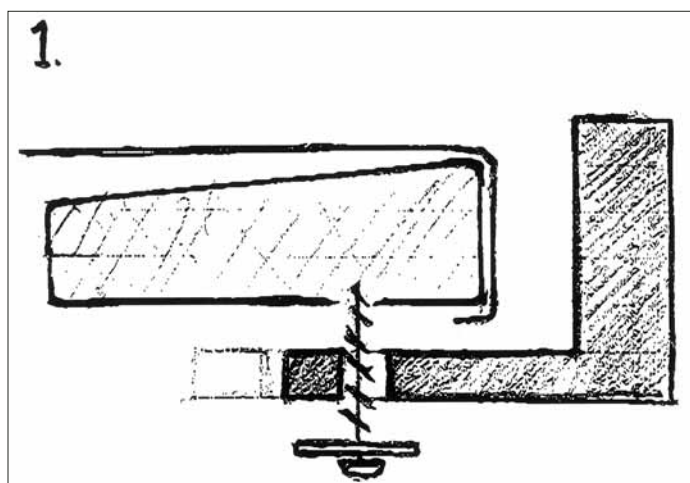
frame may have bead edge damage and be structurally questionable. Always remove the painting to be reframed and inspect it carefully, checking for conditions that would affect its proper mounting.

Artists treat the edge of the painting as they feel proper, and the framer is obligated to respect the painter's intent. Many contemporary paintings are edge wrapped and stapled to the back of the bars (termed "gallery wrapping"), while others may have tacks or staples exposed; the artist may have intentionally painted the edge in a contrasting color, or the image field may continue around the edge of the canvas. Whatever the painter has provided, the framer will work with; it is not a good idea to modify the sides of the painting in any way.

When designing the frame package, take into account that: 1) It is important the outside edge of the frame extend above the surface of the painting by at least $\frac{3}{16}$ " to $\frac{1}{2}$ "; 2) If the painting has an irregular or impasto surface, measure the highest point to determine the proper frame depth; and 3) Check that the canvas is at the proper tension and does not sag forward (i.e. "belly out"); be especially certain large, heavily painted works that the center of the painting does protrude beyond the plane of the float frame. The primary purpose of the frame is to protect the painting, and this may not be possible with a flush or recessed frame edge.

A float frame may be used in conjunction with an outer rabbeted frame if glazing is required. The glazing is rested on the float, sufficiently away from the painting, and the outer frame is placed over the glazing. The bearing surface that the

Figure 1: Screws are used to attach the float frame profile to the stretcher bars.



glazing sits on (the width of the float) and the possible inward deflection of the glazing material must also be considered.

Fitting Methods

Float frames do not overlap the artwork and therefore must be securely attached to the back of the stretcher bars. There are three standard methods for attaching the painting to the float frame: screwing the frame directly to the stretcher bars; using offset clips attached to the stretcher bars and overlapping the inside edge of the frame; and attaching the painting with a recloseable pressure-activated fastening system.

When fitting a float frame, it is important to have an assistant available as the recto and verso of the piece must be viewed at the same time to prevent misalignment (and potential damage) to both the art and frame. As the painting is entirely exposed during the fitting process (and Murphy's Law is law, not theory), it is necessary to plan and practice the safest methods.

Indent holes for the hardware with an awl prior to drilling the pilot hole. This will prevent the drill from skating across the back of the frame or bars. The use of a brad

point drill bit will help with this. Use a depth stop collar on the drill bit to prevent overdrilling; set the collar slightly less than the screw shaft length ($\frac{1}{16}$ " or 1.59 mm). For softwoods, drill the pilot hole with a bit that is slightly narrower than the screw shank (the smooth portion above the threads). For hardwoods, the bit should be the same diameter.

The pan or round head screws used to secure the fitting hardware should have a shaft length that is $\frac{1}{4}$ " (6.35 mm) shorter than the thickness of the bars, frame, or liner it is to go into. This is to prevent the possibility of a screw coming through the surface. If the screw head is not at least $\frac{3}{16}$ " (4.7625 mm) larger than the diameter of the hole in the hardware, a washer should be used. Do not overtighten the screws or other hardware; rather, exert the minimum amount of pressure necessary to hold the painting in.

Using screws

Figure 1 illustrates this method. Pre-drill the holes in the frame back for the screws, making them slightly oversized by $\frac{3}{16}$ " (4.76 mm) to allow for minimal adjustment (up and down, side to side). The fewer holes in the stretcher bar the better—generally, one screw every 12 to 18

inches (30 to 46 cm). To position the painting in the frame, use matboard shims to evenly space the painting on all four sides.

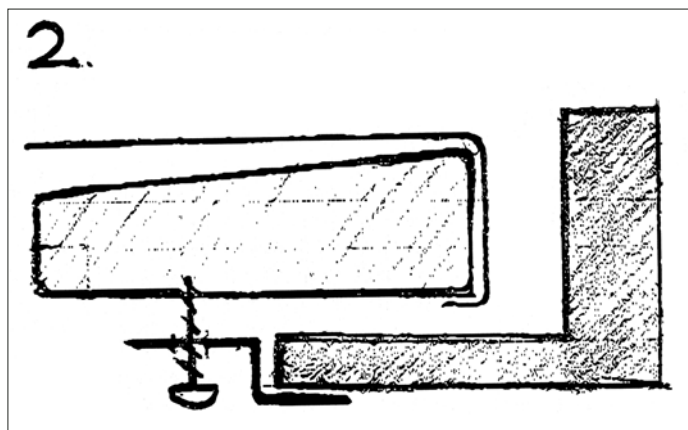
With the painting lying face-up and properly spaced in the frame, position the edge of the painting so that it overhangs the table and the screw holes in the back can be reached from underneath. With the help of an assistant to hold the painting and frame, drill a pilot hole into the stretcher bar (drilling the pilot hole through the drill hole in the frame back assures an exact fit).

A depth stop collar must be used to prevent the possibility of drilling through the bar and into the painting. Using pan head screws with flat washers, or oval headed screws with cup washers, place a screw in the center of each rail. Before continuing, examine the fit and spacing. Rotate the painting, putting a screw in each side so as to avoid uneven stress on the painting. (The rotation is basically the same as that of tacking a canvas to the bars.) Tighten the screws down to a snug, but not tight, fit.

Using offsets and screws

This method is shown in Figure 2. Select an offset that corresponds with the frame thickness. It may be necessary to modify the offset by bending it to the required shape. Place the art in the frame and center it; shim the painting firmly on all sides to properly space it. Stand the painting upright and, with an assistant holding it or with the piece clamped in an easel, mark the location for the offsets on the stretcher bar. There should be one offset approximately every 8 to 12 inches (20 to 30 cm), staying 3 inches from the corners. Protect the back of the painting with

Figure 2: Using offsets and screws together are another way to mount a canvas in a float frame.



a sheet of foam-centered board and always hold the tools with both hands. Begin at the bottom of the frame and secure three bottom offsets to register the painting properly. Next, set the sides with one clip each. Remove the shims and make certain the painting is where you want it, then set the top center clip. Fill in with the remaining offset clips.

Using recloseable fasteners

See Figure 3 for this process. Mounting paintings with recloseable fasteners is a readily reversible method for small to medium size paintings. Generally, I use this method for works of 72 united inches and less.

Although it is convenient and does not have the potential to damage the stretcher bars as screws do, conventional hook and loop fabric fasteners will allow the painting to eventually sag in the

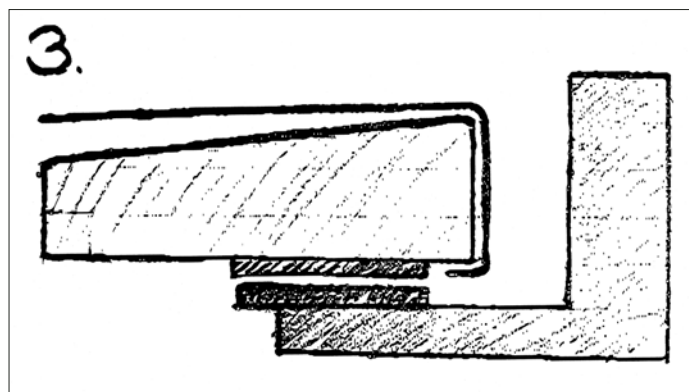
frame, termed “the slump factor.” The bottom margin space will decrease while the top margin will increase. To prevent “slumping” and as an added security device, a screw is placed in the top rail and one in the bottom rail of the frame.

Developments in recloseable fastener technology, such as Dual Lock™ from 3M, have overcome the problem of slumping. The Dual Lock system uses an interlocking cap-and-stem design on an inert plastic strip that attaches to itself with a distinct snapping sound.

Before using a recloseable fastener system, review the manufacturers specifications to determine the correct amount of fastener to use. The maximum continuous static load (sheer strength) of the fastener is rated in pounds/square inch (grams/square centimeter).

Allow about 1/16" (1.59 mm) of the fastener to overlap the inside edge of the frame. This will permit

Figure 3: Recloseable fasteners can be used to mount artwork in a float frame, for a reversible mounting method.



easy location of the fasteners if the painting should need to be removed. If there is any concern about the possible dislodging of the painting from the frame, place a single screw in the top back panel for security. Although the pressure-sensitive adhesive on the fastener works well, it is advisable to also staple the fastener to the bar and frame. Pad the bead edge and apply gentle pressure to set the fastener, using caution not to

make contact with the unsupported area adjacent to the bead. If there is any question as to the condition of the bead edge or the possibility of any damage to the paint, ground, or textile, don't use this method.

Backing the Painting

A rigid backing board is fundamental to prevent accidental damage as well as to keep out dust and vermin. The backer also provides a buffer against

environmental change, such as rapid increases and decreases in relative humidity and temperature that can happen during transport or the seasonal fluctuations that can occur with heating and cooling systems. The material used for the backing should have a high strength to weight ratio and be of pH neutral material. Two options are Coroplast or foam-centered board.

Although widely accepted in the American framing industry during the latter half of the 20th century, cutting air circulation vents into the backing board to allow the painting to "breathe" is no longer considered sound practice. Circulation vents in the backer board allow for the development of dangerous localized environmental conditions. The back of the painting opposite the vent is exposed to potential rapid changes in temperature and relative humidity that the rest of the painting is buffered from.

Cut the backer board to fit inside the float frame and rest it against the stretcher bar. It may be held in place with a series of turnbuckles if it fits flush, or with small offsets if more or less space is needed. Frame sealing tape may also be employed to secure the backer as well as finish off the verso. ■

Paul MacFarland, CPF, has been involved in the fine art framing industry since 1977; frame carver and gilder; retail frame shop owner; production manager for a moulding manufacturer; national sales manager for framing products distribution firm; CPF since 1986; active in PPFA; co-founder of the New Mexico Zia Chapter and VP of Northcoast (Cleveland) Chapter; 1992 founded Art Preservation resources, a company that provides product testing, consulting and training services for the industry's leading manufacturers, publishers and product distributors.

