

Preservation Practices



by Hugh Phibbs

Aluminum Options in Preservation

Anodized aluminum sectional frames have played a major role in commercial framing for more than 30 years. If handled properly, they can work well in preservation framing. The hardware channel in the back of these frames is a built-in stiffener which allows this type of frame to be used without a strainer for small and moderate size packages.

The more recently developed, wider styles offer even more support than the

hardware channel is fixed has to be considered when a particular frame profile is used. Shallower profiles may not be able to accommodate deeper mats or any spacer elements. Deeper profiles are more accommodating.

Still, all sectional frames lack the adjustability of a back loading frame. When the glazing/mat/backing board package is secured in a back loading frame, it can be gently pressed into position with the brads or points used to hold it, or with pressure that comes from the strainer as it is screwed in. In a sectional frame, this same pressure will come from the contact between the front of the hardware channel and the back of the backing board, or some element that is interposed between them.

The one option that should be avoided is the use of spring clips. These fittings provide uneven pressure, and over time the backing and mat may become warped along their edges and further in toward their centers. A safer strategy employs strips of polystyrene foam board pressed in between the hardware channel and the backing board (see Figure 1). These strips should be wide enough so that they stick out beyond the inner back edge of the hardware channel and therefore will be easy to remove in the future. These strips can be made from scrap and will not add any cost to the framing job.

With proper reinforcement, deeper profile sectional frames can be used for much larger projects. This reinforcement

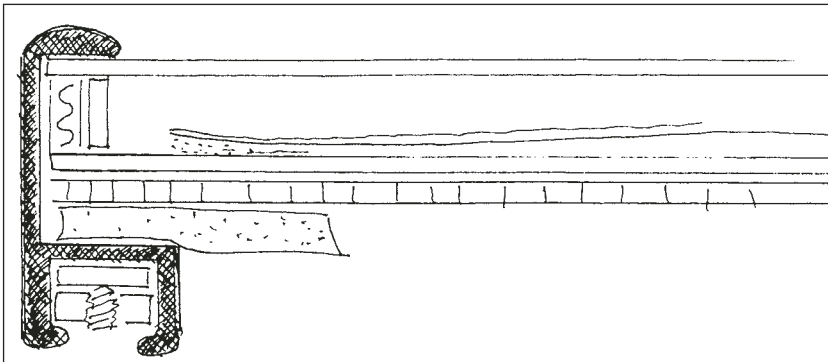


Figure 1: Rather than use spring clips to secure the glazing/mat/backing package, polystyrene foam board can be inserted between the hardware channel and the backing board.

traditional, narrow face profiles. The anodized surface of the aluminum is electrically fully oxidized and should be impervious to atmospheric corrosion. This makes it one of the few surfaces that do not need to be isolated from the edge of the mat package. The main challenges presented by the use of sectional frames in preservation framing come from the assembly of the frame, and from their use in framing very large works.

The fact that the distance between the lip or rabbet width of the frame and the

should comprise a wooden strainer that fits in between the hardware channel and the back of the backing board. It is possible to secure the frame to the strainer with screws that penetrate the sides of the frame and proceed into the strainer, as is the case with welded aluminum frames. The difficulty here is finding screws that fit the aesthetics of the frame.

A simpler solution employs screws that go through the back of the hardware channel and into the back side of the strainer. In this case, the strainer must be situated so that it touches the hardware channel and any space between its front surface and the back of the backing board should be filled with strips of polystyrene foam board. When the size of the frame grows still larger (over 40"x60"), it is wise to use screws that go through the sides of the frame on the top and bottom members. This will draw the frame tight to the strainer there, and ensure that the top cannot be pulled loose if the frame is picked up in an improper manner. It will also ensure that the glazing will not overburden the lower corners of the frame which are at some distance from the hardware channel.

With frames this large, the top and bottom surfaces should be above and below the viewer's field of vision and the screws will not mar the aesthetics of the frame. The screws on the side members can be put in from the back so the sides will have a clean look. When any procedure such as this (which is not consistent throughout the frame) is used, a note of this should be made on the back of the frame to alert

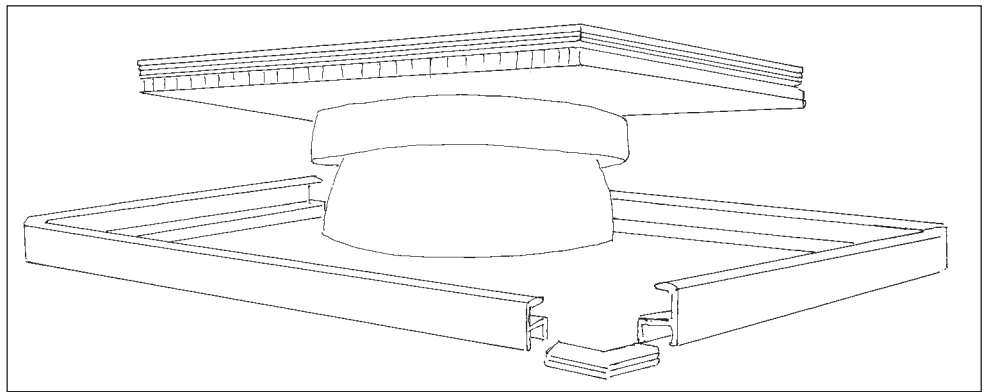


Figure 2: A lazy susan can be a helpful tool when assembling the frame package in an aluminum sectional frame.

those who may take apart the frame in the future.

Assembly of these frames should be given special attention when they are used in preservation framing. Ordinarily, two adjacent corners of the frame are assembled so that a C-shaped structure is created and the glazing/mat/backing board package can be slid in at the open side.

When glass is used, this sort of assembly can lead to chipped edges on the glass. It can also result in situations in which the package becomes stuck as it is slid in. This tendency is exacerbated by the tighter allowances often used with metal frames in order to keep the glass from shifting against the hard sides of the frame.

Before we address the assembly issue, the question of glass in metal frames deserves some attention. Some years ago, polyethylene C-shaped tubing was used to pad the glass in some metal frames. While this probably helped, it required the cutting of the glass to extremely exacting tolerances. Flaws in the design of corner hardware that led to glass breakage have been solved, and if the edges of the lite of glass are dulled with an edge seamer, chipping should be

minimized.

An idea currently in use by some framers addresses some of the "glass against metal" problem. When frames that have separate glass channels are being assembled, the use of 2.5 millimeter glass in place of 2 millimeter glass will help to prevent looseness and rattling on the part of the glass. Thicker glass is also stronger, thus more suitable for preservation framing.

Another approach to assembly, and one that permits greater control, begins with an idea suggested by Gail Clements of the Gilcrease Museum in Tulsa, OK. A lazy susan, such as might be used for sculpture or food service, can be fitted with a support board to enlarge its upper surface (see Figure 2). The fitted glazing/mat/backing board package can be laid on top of this turntable and two corners of the sectional frame can be assembled. Here, however, they are opposite and not adjacent corners and the assembly mirrors the technique commonly used for wood frames.

These frame sections can now be placed around the frame package and the hardware can be inserted into the two remaining corners. With that completed, the frame

can be rotated so that one of the unsecured corners extends over the edge of the work table, allowing for the tightening of the final screws.

Those frames that have separate channels for the glass cannot be assembled this way. They must be joined traditionally and have their final members installed while the frame is standing upright, so that gravity will not cause the glass to sag, making it difficult to fit into the glass channel.

Products used in preservation framing must always be chosen in light of their strengths and weaknesses. Wood frames come in a huge variety of shapes and sizes and can be variously strengthened and deep-

ened. Their backloading design permits simple, adjustable assembly, but they are sources of tannic, formic, and acetic acid and peroxides.

Anodized aluminum frames have more finite dimensions and specialized assembly, but they have non-donor surfaces (i.e. they will not emit anything) and with proper handling can be invaluable to preservation framing. ■