

Mastering Mounting



by Chris A. Paschke
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Peel Proof Photos

The challenge was to create a presentation of reprinted photographs to be installed in the new Tehachapi Depot Railroad Museum. They were not to be framed, had to have a contemporary feel, needed to be floated off the wall, and most importantly had to be peel proof. There were to be nearly 200 photos of assorted sizes and another 25 14"x18" signs that would tell the story

of the historic 1853 depot. A 30' long timeline was to be the focal point of the freight room with photos, dates, and descriptions of historical events (Photo 1). The museum is meant to be very interactive, but one that could withstand lots of touching without damage. The obvious solution was to turn the photos all into plaques.

Plaques are images—print or photo—that are permanently heat-mounted to a wood substrate and then laminated for surface protection. The sides of the wood panels are often decoratively routed or beveled at the top edge to give them more of a finished look. The wood may be stained or painted as desired. (See PFM "Plaquing: Where It All Began" June 2001, and "Plaquing Today" April 2006 for additional information of the process of creating plaques.)

Substrate Selection

The depot project director was adamant that the photos should be permanently installed and resistant to peeling



Photo 1: The timeline was a 5'x30' long wood panel with a model railroad track as the line. Dates and historic events were marked by photo plaques and written descriptions.

by inquisitive little fingers. Numerous samples of mounted photos were presented on everything from Gatorboard to 4-ply matboard, and the committee finally settled on hardboard plaques that could be cleanly cut with a table saw, sanded, and painted (Photo 2). They would be lifted from the wall by 1/2" deep x 3/4" wide mitered pine frames cut 1" smaller all around.

The 3/8" commercial clay-coated artist panels were purchased as 18"x24" sheets and sized as needed, saving money on material. Since the photos ended up being nonstandard sizes, they could be puzzled and arranged for maximum use of the panels. There was very little waste.

The Photos

All of the historic original photos had been scanned and stored in the local Heritage Museum archive. Once the images were selected for the depot, they were copied to a CD and taken to a digital photo and

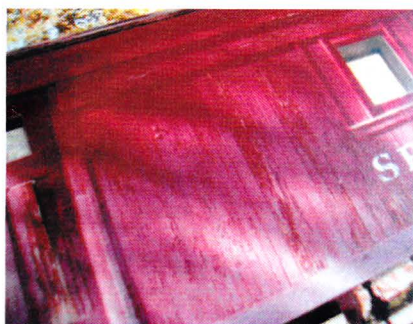


Photo 8: After numerous attempts at repair, tiny holes were pricked through the film—trying not to hit the photo—and the air was released.



Photo 9: Excess lamination was trimmed away, Drytac pure film adhesive was sized to the dimensions of the panel, and the laminated photo is tacked in place for final mounting.

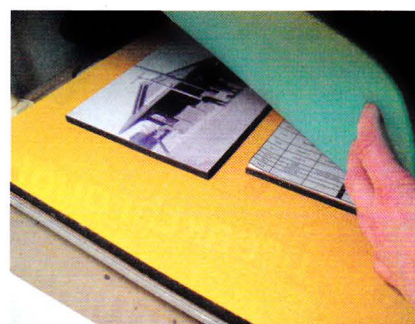


Photo 10: Laminated prints were trimmed, tacked, and placed in a 200°F press with 1/4" sponge to mount.

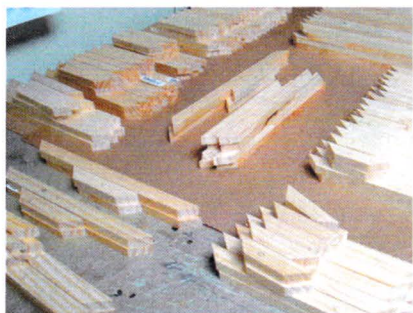


Photo 11: Lifters were custom chopped, built, and coded to the corresponding plaque.



Photo 12: All plaques and lifters are coded, matched, and grouped for transport and installation.

photo was placed in the press for a final time with success (Photo 8).

Cause and Solution

Once this issue was resolved, it needed to be established why the perforated laminate did not perform as expected. After considering time, temperature, pressure, and moisture (TTPM), the laminate itself needed to be examined. The holes had all sealed during the laminating process as they should, but there was still trapped air. It was from the last quarter of a roll that was a few years old, so it was likely that the perforations had partially closed with storage and time. Since I prefer non-perforated laminates—because they allow for decorative applications—another roll of matte film was selected, although it was even older.

I altered the steps from tack, mount, align laminate, mount and decided to laminate the photos, trim them to fit the prepared substrate, and

then mount them. The press had to be readjusted to proper pressure to accommodate the thinner laminate and photo with no substrate.

Laminating

Each sheet of laminate was sized about 1" larger than the photo and was manually perforated. The print was placed between the perforated laminate and its own release liner then placed in a 215°F press for 10 minutes using a 1/2" sponge overlay. Excess lamination was trimmed from the photo, Drytac pure film adhesive was sized to the exact dimensions of the panel, and the laminated photo was tacked in place for final mounting (Photo 9).

The press had to be readjusted to the proper pressure to accommodate the thicker 3/8" panels plus a 1/4" sponge overlay, and the laminated prints were placed in the press for one to two minutes to mount them to the panel (Photo 10).

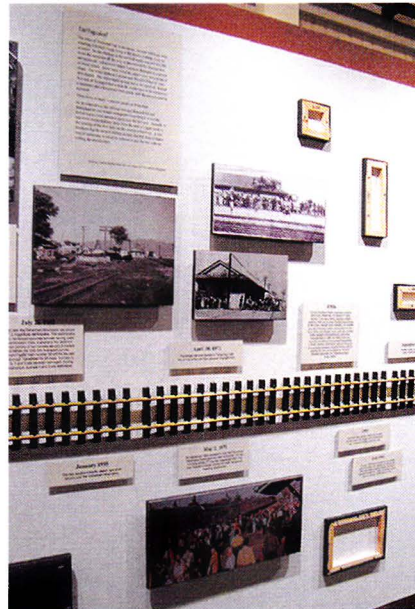


Photo 13: Lifters were nailed to the wood timeline (R) in preparation for adhering the plaque (L). Notice the mounted/laminated labels and signs that have been bonded to 3/16" black foamboard and affixed to the wall.

Lifters and Installation

The 1/2" lifters were all chopped to size to fit each plaque—1" smaller around—and coded to match (Photo 11). They were painted dark gray around the sides to match the sides of the plaques and stacked with their corresponding completed photo (Photo 12). They were stacked in separate boxes for each specific coded location, arranged, and installed as individual wall groupings.

The original plan was to screw all the lifters to the wall and hot glue the plaques to them, but this would preclude the removal of any images with-



Photo 2: This 3/8" thick hardboard sampler had various stains and paint colors on the sides and lifter to aid in selection.



Photo 3: This first batch of 100-plus photos was rough cut, coded, and sorted by group. The stack of 1824 commercial clay-coated MDF boards are at top center.



Photo 4: Five photos and a printed train schedule all fit onto this 1824 panel, shown back side up for tracing and coding to match the photo.



Photo 5: After sizing on a table saw, all boards were wiped down and restacked by wall location and number.



Photo 6: The edges were lightly sanded, painted dark gray, and both the photos and panels were grouped by wall placement.

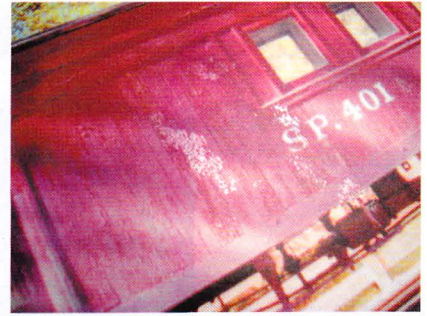


Photo 7: There was a white irregular patch of trapped air just left of center during the first mounting.

sign expert at Mercury Graphics to be enlarged and printed. Prior to making a total plaquing commitment to the project, the heat and vinyl laminate tolerances of the selected prints needed to be tested. The result turned out to be a 54" Roland VersaCAMM VP-5401—used for signs, banners, billboards, decals, and now artistic plaques—an Eco Solvent printer that is totally compatible with heat mounting and laminating procedures.

The paper of choice was Aspire Gloss Solvent Paper. It is a mid-weight photo paper with a satin sheen that is extremely resistant to water, scratches, and fingerprints. It was the perfect choice for this project.

Preparation

All the photos came group printed on 54" wide rolls, so the first step was to rough cut them apart and add their location code (A-1, B-3, G-1, etc.) for the corresponding depot wall to which

they would be mounted (Photo 3). Then they needed to be trimmed to exact size for accurate arrangement onto the larger panels, which also had to be coded (Photo 4). Though tightly fitted, a 1/4" allowance was required for material loss during cutting, so the photos could not be butted together.

After sizing on a table saw, the boards were all wiped down and restacked by wall location and number (Photo 5). The edges were lightly sanded and painted dark gray, and both the photos and panels were again grouped by wall placement (Photo 6).

Laminate Test

There were five real 8"x10" Kodak glossy film photos in the mix, so these were mounted and laminated first just to get them out of the way. Since all the photos were under 16"x20" a Seal 210 Mechanical Press was used for ease. They were all mounted with ColorMount permanent tissue adhe-

sive to the dry, clay-coated 3/8" MDF. But much to my surprise the very first little red caboose photo that was laminated had uncompressed air remaining under the pre-perforated laminate (Photo 7). This should not have happened.

A matte finish pre-perforated laminate had been selected because of potential porosity issues, but air was still trapped. Though the small samplers had no problem with trapped air, for some reason these slightly larger boards and the glossy photo did not allow the air escape through the edges and the perforations.

In an attempt to repair the problem the laminated photo was placed back into the press with thicker sponge and then with a release board. Though improved, the problem was not resolved. Ultimately, additional air holes were pricked through the laminate, which was lightly burnished with a bone to compress the air, and the

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The Show Everyone Is Talking About

The 2010 National Conference was my first show, and it turned out to be an invaluable experience. In particular, I'd always wanted to take The Goltz Standard: Pricing Strategies by Jay Goltz. I wasn't disappointed in the least, as I left with a wealth of insights and techniques I immediately applied to my business. The West Coast Art & Frame Show also gave me the opportunity to see all the latest new releases and products from the art & framing industry.

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out tearing them apart in the process. The alternative solution was to nail them, which would deter theft while still allowing for the removal or exchange of a plaque without destroying it (Photo 13). A 1" wide high tack, indoor/outdoor sponge tape was chosen as the adhesive rather than glue. It was faster, easier, and cleaner and could fill any gaps between the lifter and plaque resulting from the uneven wood building walls.

The historic dates and labels identifying the photos were mounted and laminated to 3/16" black foam-board, reverse bevel cut to create the floating appearance, and fused to the wall with the same sponge tape. The use of foamboard for the signage created a variation of depth and shadow and allowed for more visual interest.

Final Stop

The grand opening and celebration of the new Tehachapi Railroad Museum was June 5, 2010, and it was attended by so many people that you couldn't walk through the depot. The best part is that all the photos are still where they were installed, although two of them did have to be moved. I'm glad we used nails. ■

Chris A. Paschke, CPF, GCF, CMG, mounting editor, owns Designs Ink in Tehachapi, CA, featuring custom framing, fine art/graphic design, and consulting. Specializing in mounting, matting, design, and fine art, she teaches at The National Conference. She has written four books on mounting including *The Mounting and Laminating Handbook* (third edition) and *Creative Mounting, Wrapping, and Laminating*, available from PFM PubCo. She may be contacted through www.designsinkart.com.