

# Mastering Mounting

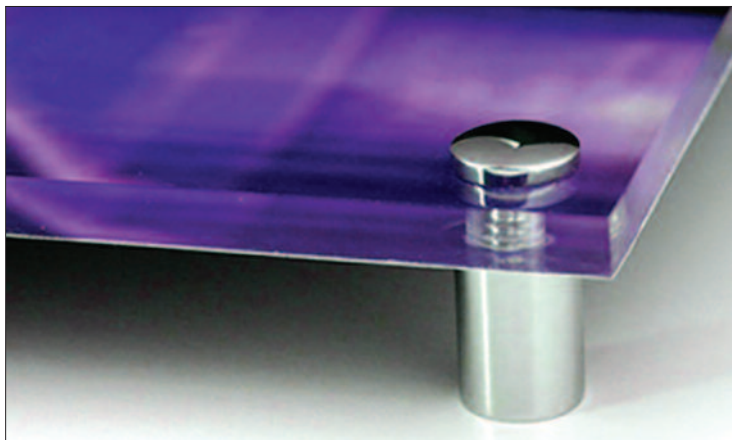
by Chris A. Paschke, CPF, GCF



## *Keeping Up With Technology*

**P**icture framing has always been a state-of-the-art industry evolving with the times to best preserve and protect framed art. In 1972, when Paul Frederick taught my father the basics of framing at his school in South San Francisco, he used corrugated cardboard as filler, masking tape, and spray adhesive. Foamboard didn't exist, and preservation treatment wasn't even in a framer's repertoire.

Today, mounting is far more than simply affixing an image to a rigid sub-



*Digital photo facemounted to the back of 1/4" polished clear acrylic using clear p-s adhesive with standoff posts ready for installation.*

*With new print media and mounting products, framing today is far more demanding than ever*

strate. Water-based wet glue may damage waterborne inks, solvent base spray adhesive may damage solvent inkjet, and digitally printed canvases do not hold with tear strength to every film adhesive or heat activated (HA) board. Mounting takes educated decisions about what will bond best, for the desired

length of time, without damaging inks, to a specific substrate. That requires the knowledge of what is available and how to use it.

Framing in the twenty-first century is far more demanding than in previous decades because digital is everywhere and framers must keep up with technology to accommodate their customers' needs. Today's framers are working for both residential and commercial consumers, requiring them to be well-versed in what to use and also how to

mount, stretch, and frame the newest types of prints. Many full-service framers have added large hot/cold roller laminators to their equipment, allowing them to mount 40"x120" prints or longer. Substrates are also more than foam and paper board. Heavy duty, rigid boards like Gatorboard, Ryno, and MightyCore have joined Sintra, styrene-faced boards, edged hardboards, acrylic, aluminum, and Dibond aluminum composite material (ACM) as commonplace substrates in a frame shop.

### **Adhesive History**

Adhesives have been the solution for holding things together and repairing damage for a long time. From the early 1800s to 1945, adhesives included protein-based (hide glue, gelatin), sugar-based (dextrin), starch-based (arrowroot, wheat, corn, potato, rice), vegetable or gum-based (gum arabic, a.k.a. acacia gum), rubber based (rubber cement), and assorted combinations of these materials. Extensive moisture was necessary when bonding any of the adhesives, which introduced expansion, stretching,

cockling, and/or curvatures in both photographs and paper prints. Rubber cement was the least moisture-inducing but contained sulfur, which discolored and was a temporary bonding solution that failed shortly after mounting.

In an effort to keep moisture down, a thin paper carrier was developed with thermoplastic adhesive on either side activated by heat, and dry mounting was born. A thermoplastic substance becomes soft and pliable when heated without a change in its intrinsic properties. The term “dry mount” was originally used to distinguish between this new technique from previous damp and wet cold mounting techniques.

## Face Mounting

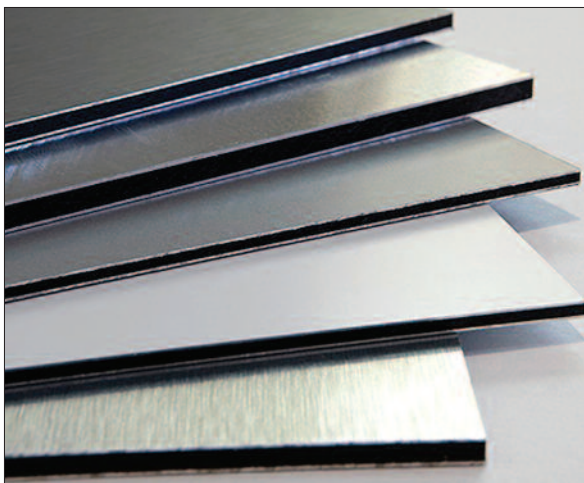
In 1993, Stephanie Watkins, AIC (American Institute for Conservators), wrote, “Dry mount has been used on photographs, books, papers, textiles, and paintings in conservation treatments throughout history” and stated that the technique of mounting was acceptable even by conservators but rather limited to specific situations. Only non-invasive, reversible methods using starch were allowed with valuables. By 2004, museum curators were being forced to deal with large face-mounted images—done by the artist—being added to their collections. Face mounting is the permanent mounting of the surface of a digital image to the verso (back) side of clear acrylic for display. Unsure of the preservation longevity of this method, museums now often purchase two from artists—one for display and one for dark storage.

## Lower Temperatures

With the arrival of foamboards, higher roll adhesive mounting and laminating temperatures (205°F–225°F) threatened the stability of the core, which begins to melt at 225°F. As a result, both adhesive and over-laminates



*KoolTack Insta Mount on assorted substrates (top to bottom): competition plate (ACM), Gatorboard, Mighty Tough, and foamboards.*



*Dibond comes in an assortment of surface colors, metallics, finishes, and thicknesses. Brushed Silver thin, Brushed Silver thick, Gray, White, Bright Silver (top to bottom).*

have been reformulated with lower activation temperatures to soften adhesives, making the process less invasive. Lower temperatures also allow for less adhesive absorption while lowering the threat of foam damage. Throughout the history of dry mounting, formulations of dry mount adhesives have evolved, first to meet the needs of paper and heat-tolerant photographic materials and now for digitally generated images such as photographs, prints, and canvases. By 2016, HA boards were available with activation temperatures as low as 130°F.

## Foamboards

The original Fome-Cor® white foamboard was developed in 1957 for the graphic arts industry by Monsanto Company. They sold it to International Paper in 1993, making foamboard a significant player in the framing industry, while still being avoided by museums. In December 2007, the passing of International Standards Organization ISO 18902 accepted the use of foamboards in framing enclosures. This has significantly changed the development and use of foamboard in framing as filler board, backing board, and pre-adhesive P-S and HA boards.

## Preadhesive Materials

Cold pressure-sensitive adhesives (P-S, PSA) are pressure-activated thermoplastics. They are dry, synthetic adhesives that are easy to use and clean and are odorless, requiring no moisture for application. They bond at room temperature, with only the application of even pressure and weight during curing. Although there are P-S products that are available as films, with single and double-release liners, it is the P-S board that has become a store staple. PSA is a permanently tacky substance that bonds to poster, photo, or digital images but may have limitations with fabrics.

Thermal-activated boards have been in the framing

market since the 1990s and have become a staple in the industry. Boards have heat-activated adhesive applied to an existing substrate that will mount in any heat system (mechanical press, hot vacuum press, hot rollers) at assorted temperatures ranging from 190°F to 130°F. They come in permanent, removable, and reversible formats, with a wide variety of thicknesses. Historically, dry mounting has never been a reversible technique. Removable yes; reversible no.

## Trends and Innovations

With digital technology being today's standard, there are few images that are not digitally produced. From small desktop printers to grand format printers over 72" wide, framers are now asked to mount or frame everything. A photo might be a heat tolerant chemical (analog) print, heat tolerant Kodak Endura Color Metallic RC Paper, new heat and surface sensitive Kodak Endura Metallic VC Digital Paper, or Fuji Crystal Archive Digital Pearl Paper. It might be mounted on a low-temperature HA foamboard, with tissue and Gatorboard, or facemounted to the back of clear acrylic. It could be an 8"x10" or 24"x120" with a frame or displayed as a frameless panel

and might be hung with traditional D-rings and wire or spaced away from the wall with standoffs.

Today's framer needs to know the difference between an original painting on canvas, hardboard, or synthetic paper and a digital image of waterborne, solvent, latex, UV-curing, or dye-sublimation inkjet print. Even if you don't have the capability of mounting the item in your own shop, you can always subcontract the mount as long as you understand the process and your limitations.

Facemounting and metal prints are very trendy at the moment and you need to totally understand how to handle both for your customer, so education is key. **PFM**

*Chris is a popular instructor at The National Conference and will share more of her mounting expertise in Las Vegas.*

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**Chris A. Paschke**, CPF, GCF, CMG, owner of Designs Ink in Tehachapi, CA, is a professional picture framer with over four decades of experience. She is an artist and educator, has authored numerous magazine series, including The Essence of Design, Design Concepts, and Digital Directions for PFM, and has four self-published books on mounting. She currently writes the Mastering Mounting column for PFM and is a contributing writer to The Artist's Magazine, The Pastel Journal, and Watercolor Artist Magazine. She was honored with the PPA Award of Distinction for Leadership 2008, the Vivian Kistler Recognition for Innovation Award 2010, and the PMA Distinguished Service Award 2012.